

GREEN SPACE FROM DEAD SPACE



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ABSTRACT

This project examines the creation of successful urban green space. More specifically, the main focus of this project is the investigation of how the installation of an urban park system that includes land use dedicated to urban agriculture, in partnership with mixed-use infill development can stimulate the economy and improve quality of life within a small town urban context. By redeveloping vacant or under utilized land into urban parks and mixed-use development, this project means to create the opportunity for pedestrian movement and occupation of space in a way that is currently impossible.

The specific application of this investigation is the redevelopment of vacant lots and oversized or under-utilized parking lots in downtown Muncie. These spaces will be redesigned into a series of green spaces and pedestrian shopping corridors to provide users of downtown with a means for pedestrian transportation, a place to gather, and in general, an added reason to populate downtown. This will increase activity downtown, raise property values, and attract new business to new development and existing commercial space, all of which will contribute to the overall goal of stimulating the economy and creating a marketable face for the new downtown Muncie.

ACKNOWLEDGEMENTS

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INTRODUCTION

Imagine a place in which there are always people walking around, where local stores line the well occupied streets and where there exists a variety of green space in which to organize special events, let your kids go to play after dinner, or just sit and eat during your lunch break. This is a wonderful image and maybe one that feels like Eden, in more ways than one. Often this idyllic world that has just been described gets the bad reputation of being unattainable. Quite to the contrary, it is more than possible to create such an environment and resource within Muncie, and specifically downtown.

Downtown Muncie, through the strategic redevelopment of under utilized vacant space into urban green space, has the great potential to become a place where people truly want to be. Not a place where people simply drive to a parking lot, walk across the parking lot to their destination, then walk back to their car and drive home when they are finished, but a place where people will spend the afternoon walking around enjoying the experience of being downtown, and especially the experience of being downtown with a variety of others.

This project will make this happen by designing a network of urban green spaces

and urban agricultural plots for the benefit of the downtown community and even the larger community of Muncie as a whole. These green spaces will make downtown more pedestrian friendly, will provide venues for formal and informal gathering, as well as, stimulate the economy by improving property values, and making downtown a destination which will attract new customers and new businesses alike. Also, the use of urban agriculture will improve the self-sufficiency of the region by providing fresh produce to downtown restaurants and grocers, and therefore, will provide locally grown food to the residents of Muncie.

In short, this project will revive a space that is now begging for some attention. Business owners will benefit, potential outside visitors will benefit, the environment will benefit, but more than anything, the true benefit will be given to the residents of Muncie. The sense of ownership and pride that this project will create for downtown Muncie is the one thing that is needed the most, and ironically, the one thing that will guarantee this project's success. I hope to provide both.

PROBLEM

This research will investigate the elements of successful small town urban green spaces that invigorate the local economy, including public parks and urban farming. The specific aim of this project will be the redevelopment of unused or under utilized open space in downtown Muncie into an urban park and urban farming system that will aid in reinvigorating the local economy.

1. What defines successful urban green space?
2. How can urban green space aid in the economic revitalization of small town urban areas?
3. What is the suitability of unused or under utilized spaces existing in downtown Muncie for the creation of a park space?
4. What is the suitability of available space in downtown Muncie for urban farming?

HYPOTHESIS

1. Successful urban green spaces are those that create destinations for the region and provide a venue for user gathering and special events.
2. Urban green spaces can aid in small town economic revitalization by providing a draw for people to economically struggling areas. They can also create a multi-modal



transportation alley that encourages higher pedestrian user traffic.

3. The majority of under utilized lands in downtown Muncie will be suitable for urban parks because very little heavy soil pollution exists.

4. Open space in downtown Muncie will also be suitable for urban agriculture given the existence of small-scale urban gardens in the area already.

DEFINITION OF TERMS

1. Urban Green Space: The plots of land designated/designed to be public parks or specifically used for urban farming.

2. Under utilized Land: The network of empty parking lots and/or vacant lots within downtown Muncie.

3. Urban Agriculture: The practice of establishing farming plots within the urban context for the use of local residents.

4. Economic Revitalization: The process of improving the existence of current businesses, as well as, encouraging future business by increasing user traffic and the overall draw of a region.

ASSUMPTIONS

1. Land identified as optimal for park/farm space can be acquired.
2. Zoning standards in downtown Muncie will remain consistent through the life span of this project.
3. Local government will allow for the re-working of some road alignments that may be necessary for the completion of this project.
4. Local grocers and restaurants will be interested in using produce from urban farming plots.

SIGNIFICANCE

Downtown Muncie is a place that has a long history of significance to the area. There still exists historic architecture and important civic establishments, but the lively nature of the region is lacking. Also, surface parking in downtown has blighted the landscape both aesthetically and from a usability standpoint. Most of these lots remain vacant for extended periods of time and result in uncomfortable and undefined urban space. By introducing a network of green spaces onto these under utilized lots, this project has the potential to reinvigorate downtown. Not only will added green space increase the visual aesthetics of downtown, but functional active spaces will also create

a community asset that is currently lacking.

New parks and especially new introduction of urban agriculture will revitalize the economy of downtown by making the area more self-sufficient and more desirable to locals and regional visitors. This increased pedestrian draw is the primary benefit of creating added green space in downtown and its positive effect on the sense of community and economic stimulus will be hard to ignore. Downtown Muncie

has the potential to become a vibrant destination for all kinds of people from throughout central Indiana. This project, which will create necessary green space and green corridors to support additional pedestrian traffic, will also instigate it, which is the main reason why this project is so important for downtown Muncie. Not only will this project create a reason for people to come downtown, but it will also support the additional user load, allowing for the potential for even more expansion.



REVIEW OF LITERATURE

SUCCESSFUL URBAN GREEN SPACE

Shaftoe, in general, presents one idea about successful public space, as those spaces that are “convivial” (6). In defining conviviality, Shaftoe discusses the need for spaces to be diverse and interactive, as well as, being adaptive enough to be equally usable during the day as at night, and in the summer just as much as during winter (6). The difficulty arises in the fact that, according to Shaftoe, most of the best examples of convivial spaces are those spaces that have evolved over time, not those that are a built attempts at creating an immediately vibrant place (6).

The Project for Public Spaces (PPS) provides another opinion on successful urban spaces. PPS is an organization that works to revitalize communities in a range of capacities from park and water front design, to downtown and mixed use redevelopment. According to PPS, ten principles for successful squares are:

1. Image and Identity
2. Attractions and Destinations
3. Amenities
4. Flexible Design
5. Seasonal Strategy
6. Access
7. The Inner Square and the Outer Square
8. Reaching Out Like an Octopus



REVIEW OF LITERATURE

9. The Central Role of Management

10. Diverse Funding Sources (Project)

Defining public space often comes in the context on urban design. In this way, public green space within the urban fabric is seen as a crucial component to successful urban design but the specifics for what makes the open space successful is not as specifically considered. Public spaces that provide people with the opportunity to gather are just as important as those places that provide green space (Sorkin, 26). Even though information is much more focused on the larger aim of urban design in general, there are still some points made that are worth considering when deciphering what makes for successful urban green space. The emphasis on green space is an obvious link because green space is a necessary asset to urban residents in order to provide an escape from the standard forms and textures of the urban fabric (Sorkin, 26). Another urban design principle that is worth considering is the idea that a designer needs to elaborate movement, and especially pedestrian movement. Pedestrian involvement is a key to successfully creating active spaces, and is also more important in today's energy starved world than ever before.

It is time that the pedestrian take the transportation dominance back from the automobile and creating alleys for pedestrians with urban green space is the first step (Sorkin, 27). Finally, the effort to make things beautiful is a necessary consideration (Sorkin, 27). Fundamentally, designers must create spaces that are desirable if people are ever expected to populate them. The design has failed if it cannot satisfy the basic need for the space to be beautiful (Sorkin, 27).

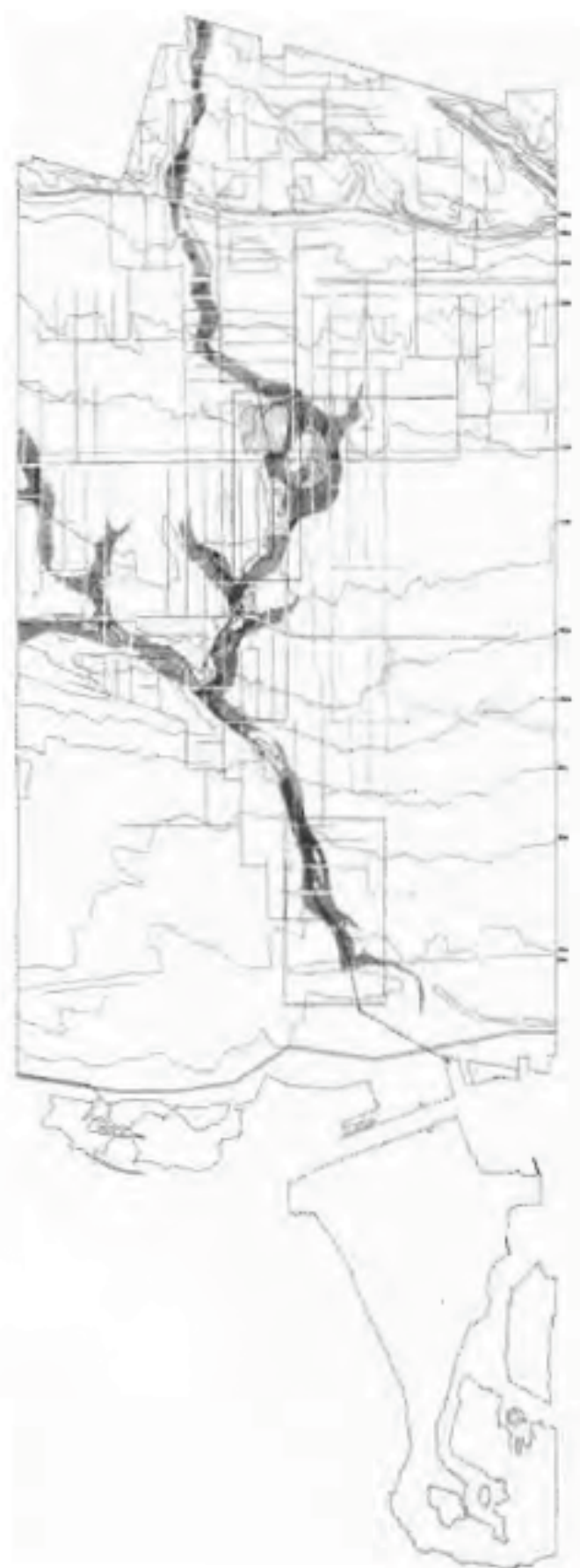
URBAN GREEN SPACE AND ECONOMIC RENEWAL

The information regarding how public space within the urban context can create some economic stimulus is very well documented and nicely applicable to the situation in downtown Muncie.

For one thing, research suggests that open space can provide a venue for more informal kinds of small business (Goodman, 71). For example, the establishment of food carts or specialized artisans can stem from the introduction of green space that receives substantial pedestrian traffic. Also, it seems possible that these spaces can be flexible enough to remain functioning all year round. Spaces that, during the summer, provide open green

space and a venue for weekend farmer's markets can, during the winter, provide space for ice skating and more enclosed kiosks selling hot chocolate (Goodman, 71). The problem with this model being applied to downtown Muncie, as exemplified in the Lavanburg Commons, is it benefits from the fact that it is in a heavily residential setting. Because of this, it is very easy to invite foot traffic through the space, for people already live there. In applying this principle for flexible urban open space in downtown Muncie, more consideration will have to be made regarding attracting people to the spaces in the first place. The flexibility of the Lavanburg Commons model is still a great asset for creating economically stimulating urban spaces because they can constantly evolve to meet the needs of the user (Goodman, 67). This flexibility, if applied to spaces in downtown Muncie, will provide a much better chance for continued success. For as the interests of the customer changes, or the distribution of space necessary to accommodate vendors changes, so too can the spaces that provide their venue.

ParkWorks, a non-profit organization based in Cleveland has found that green space has an increasingly important economic impact on cities due to today's "New Economy," in which the young professional is much more mobile ("Making"). Because this new economy has the benefit of mobility, more value is placed on enjoyable living, and working



environments. Quality urban green spaces are a large part of this, and can have a positive impact on property values and the improvement of quality of life ("Making). This will be very informative for this project in Muncie because part of the success of the project will hinge on the ability to improve the marketable image of downtown. According to ParkWorks, green spaces have the ability to greatly improve a cities image to potential residents ("Making). There's no reason why the same can be said for future business owners.

Another benefit is the potential for green space to continue to break down existing limits on interpersonal relationships and thus provide the opportunity for just about anything to crop up just about anywhere (Sorkin, 27). This idea is originally applied to the larger context of urban design, specifically calling for the need to not limit development possibilities with shortsighted zoning. There exists an application to urban green space, though, when considering the fact that green space can create a venue for community interaction that would not exist otherwise. This interaction results in more economic development as a result of business interest garnered by more community activity. By creating a venue for public gathering, green spaces also provide a venue for

REVIEW OF LITERATURE

casual vendors and festivals, continuing to build economic stimulus (Sorkin, 26). Regularly scheduled markets also provide the opportunity for connecting local economies by increasing the proximity of producers and consumers (Project). For example, by increasing the use of a farmer's market, the money made in food consumption stays within the community and contributes to further production. This is even more effective when the farm plots also exist within the city, as this project is proposing.

URBAN GREEN SPACE SUITABILITY

As far as the social considerations are concerned, the fundamental shape of the park is just as important to its success as is the size. Parks need to be integrated into the surrounding neighborhood, while remaining safe and protected from vehicular through-traffic (French, 45). Through-traffic seems to be the key here. Vehicle traffic along the periphery of the park does not so much affect its safety, but excessive through-traffic creates higher speeds and more dangerous pedestrian crossings. This will be very important to consider in placing parks in downtown Muncie due to the high vehicular presence.

The solution to creating a park with the most open faces on adjacent neighborhoods while limiting the amount of through-traffic is to shape the park in a zigzag pattern or, when a network of smaller parks is being considering, arrange those is a "pinwheel" fashion (French, 46). It will be difficult to control the shape of individual parks in the Muncie site due to the necessity of using existing parking lots, which are almost always going to be rectangles. Where the real impact can be made is in dealing with the network of parks, as a whole, and attempting to place the individual pieces so that they work together, and create a safe environment for the pedestrian.

Other important considerations for the layout of park spaces are visual connections, transitional pedestrian areas, and a design that is flexible enough to accommodate a variety of uses (French, 45). In finding lots in downtown Muncie that are suitable to these considerations, much attention will need to be made in making sure that there is an appropriate connection to the commercial fabric, as well as, the residential one. This is another instance in which the data is more specific to a residential context and, while it still applies to the site in Muncie, there may be some adaptations that need to be made.

In examining the

suitability of a space for park design, there is another opinion that uses three prerequisites: Purpose, Function, and the Final Physical Form (French, 48). While final physical form is something that is always involved in the design process, purpose and function are considerations that are especially important in the creation of successful urban green spaces, and in determining if spaces are suitable for parks in the first place. More specifically, the purpose stage is a time for considering if the space will be a park or a square. Parks are defined as the creation of an oasis from the, "overcharged, commercial atmosphere," of the urban context, while squares are spaces that emphasize them (French, 48). This means that in determining if a given space is appropriate for the placement of a park it needs to be decided whether or not it is meant to provide an escape from the surrounding commercial sector or is designed to help engage people in it. This will be a crucial step in designing park space for downtown Muncie. The second prerequisite, function, is the necessary assessment of the spatial requirements of the park based on how it will be used and by how many people (French, 48). While the parks created in downtown Muncie will not be of the scale of many large urban green spaces, it will be important to consider the space requirements of specific uses. For example: if the purpose is to create a mini-park whose intended purpose is to serve a



particular population through the use of informal active spaces, it needs to be understood that that park, whose size will probably be no more than an acre, can only effectively serve a population that exists within a quarter mile radius (Lancaster, 56). More specific to use, if a park space is suppose to include a baseball field, that field alone will require 1.2 acres, and finding the appropriate location for such a park will have to keep that in mind (Lancaster, 56).

URBAN FARM SUITABILITY

It is necessary to examine whether or not urban agriculture is even an option given the site conditions in downtown Muncie. For one thing, it must be asked if soil that has not been used for agriculture for extended periods of time, even if not contaminated, loses its fertile, crop bearing productivity. Research done by the American Farmland Trust indicates that soil does not lose its productivity from laying fallow. In fact, allowing soil to "rest" between harvest seasons is a tactic often used by rural farmers to allow the soil to recharge and regain its fertility (Suitability, 3). Even land that has lain dormant for decades can still be cleared and prepared for growing in an environmentally and economically viable way (Suitability, 3). However, soil that has been covered in pavement or other impervious material loses



REVIEW OF LITERATURE

access to water and, therefore, loses microbial function. This effectively kills the topsoil layer, which is the most important to sustaining plant life (Suitability, 4). For a site, that is presently paved, to be redeveloped into urban farmland the topsoil layer will most likely have to be completely replaced (Suitability, 4). This has a very serious impact on the suitability of sites in downtown Muncie because many of them currently exist as parking lots.

While size is a strong determining factor in site selection, location is equally as important. Location in this context is most concerned with what is immediately surrounding the site. Some difficulties in siting urban farms include dealing with odors, maintenance vehicle traffic and the noise that that creates, and the treatment and use of wastewater (Salle, 112). In regards to sites specific to downtown Muncie these issues create some suitability restrictions. For example, the issues of odor and noise mean that locations are best suited in commercial areas where there is more noise anyway and odor is less noticed, as opposed to residential settings where both would be more of a problem. This works out pretty well for the Muncie proposal because the majority of the sites are located within downtown, which is a predominantly

commercial setting. While some fringe locations may interact with the residential sector they certainly would not be immersed in it. Dealing with wastewater is a little bit trickier as certain guidelines to water use standards must be followed (Salle, 110). In most cases, reclaimed water is not allowed for organic production, so captured wastewater is best suited for recharging groundwater supplies. If groundwater recharge is not an easy option then discharge into surface water sources is the best solution (Salle, 110). This is not a problem for Muncie sites as the proximity of the White River creates an obvious discharge site. It will remain crucial, however, that the water be filter, preferably biologically, to the level necessary for safe interaction with the White River ecosystem.

Aside from physical site suitability, research also suggests that there is a need to examine how well urban agriculture will fit in with the existing community legal and social structure (Barrett, 15). One way to do this is to do a site-specific Food Assessment. This Food Assessment is meant to gauge the range of stakeholders in the area and use community involvement as a primary facilitator (Barrett, 16). The main goal of a Food Assessment is to establish strengths and weaknesses of food consumption and production, in the local area of the proposed urban farming

project, to discover what is truly necessary and what can be sustained (Barrett, 17). This type of qualitative data is very important in establishing a successful urban agriculture project in downtown Muncie. Using this method it will be possible to find out where local food production is already being vended in an attempt to form partnerships, and where addition production and distribution can best fill in the gaps for local consumption. This is also a good source because it deals with situations on a scale that is comparable to Muncie. Up to this point, the difficulty in finding reliable sources on urban agriculture is the fact that most of the focus is placed on applications on much larger urban scales. The research behind the Food Assessment is meant to target smaller communities and, therefore, is a great fit for a proposal in Muncie.



GOALS AND OBJECTIVES

The mission of this project is to investigate necessary elements in creating successful urban green space and use these in a specific application to redeveloping downtown Muncie. The network of urban parks and urban agricultural plots is intended to create a pedestrian friendly downtown that provides people with a place to gather, aids in pedestrian transportation, creates a venue for festivals and other formal events and fills in a gap in local food production and consumption. These urban green spaces, developed from existing dead space, will create a dynamic downtown that local Muncie business owners and residents can take pride in, and feel a sense of ownership of. The following goals and objectives have been developed for this downtown redevelopment.



GOALS AND OBJECTIVES

GOALS

1. Goal: This project will recreate downtown Muncie into a pedestrian friendly zone.

A. Objective: Create green spaces that, together, form an effective pedestrian mode of transportation.

B. Objective: Reduce dependence on the automobile by reducing amount of parking and making walking more desirable.

C. Objective: Create green spaces that are also destinations for active and passive users.

2. Goal: Boost the economy of local business/Attract future business.

A. Objective: Increase foot traffic throughout downtown Muncie.

B. Objective: Make open spaces usable and attractive year round.

C. Objective: Provide venues for seasonal festivals.

3. Goal: Increase the self-sufficiency of downtown.

A. Objective: Provide local restaurants and grocery stores with fresh produce from urban farming plots.

B. Objective: Attract people to a weekly farmer's market.

4. Goal: Create a greater sense of community.

A. Objective: Make the planting and harvesting of the farming plots an activity for local children or restaurant

owners.

B. Objective: Develop green spaces in which people can gather

C. Objective: Give local users something to be proud of, and take ownership of.

DESIGN CONSIDERATIONS

1. Site Suitability: In developing a green space network in downtown Muncie, site suitability will need to be a primary consideration. This is not only a biological consideration with respect to the soil suitability for urban agriculture, but more importantly the suitability of the spaces with regard to their intended function. It will be equally important to find spaces that have the surrounding context and user base to ensure that they will be visited and used in the way they were designed to.

2. Local Culture: This consideration involves everything about the local culture from existing business to area organizations, and even as far as existing festivals and events in which large amounts of people gather. This is very important because it will define the kinds of resources that this new development can rely on, as well as, the potential for people to truly buy into it.

3. History: The history of downtown Muncie is a critical consideration when designating spaces for redevelopment. Not

only what has worked or not worked as far as development in the past is concerned, but also what the site was like before development began in the first place. This ecological history is important because part of the success of the design will rely on bringing the user back to a more naturalized setting, as well as, educating them about its importance and evolution over time.

CONCERNS

1. Community Buy-In: This design hinges on creating a place that the community really takes ownership of. If the design fails in developing a sense of responsibility and pride among the local community it has very little chance of succeeding as a whole.

2. Automobile Transportation: The redevelopment of downtown Muncie will strive to create a predominantly pedestrian friendly zone. Even so, there exists a heavy automobile presence that could make this redevelopment difficult. Also, users will have to get to downtown in the first place and maintaining some automobile convenience will be a necessity with that in mind.



3. Maintenance: The long-term success of this design will require that maintenance be performed on a consistent basis. While all of the spaces will be designed with low maintenance needs in mind, there will still be some annual attention that will need to be made. The clearing of farm plots and an effort to keep other green spaces clean and clear of trash and debris are two major examples.

PROCESS

The final step in establishing design considerations was the creation of a specific design process:

- 1.** A concrete site was chosen within the more vague scope of downtown Muncie.
- 2.** Site Inventory/Analysis revealed the opportunities and constraints of the site chosen.
- 3.** Analysis was used to develop a general framework for how development was to take place within the site.
- 4.** A number of concepts were created to respond to the general framework and needs of the site and its users generated by the Inventory and Analysis.
- 5.** Jury critiques, informal desk crits, and meetings with city officials led the development from one concept to the next, and ultimately to a final design.
- 6.** The final element is the definition of design standards to lead similar development elsewhere.

SITE SUMMARY

The site for this project is located in downtown Muncie, Indiana. The core of downtown is defined on three sides; the north, west and east by and White River. The southern extent of downtown is defined by a set of railroad tracks that run predominantly east to west.

The site encompasses the Downtown Historic District, as well as, some important civil and social institutions which include: Muncie City Hall, The Delaware County Courthouse, The Horizon Convention Center, an Ivy Tech campus, and the Cornerstone Center for the Arts.

The region that surrounds the site includes potential assets in Ball State University, Minnetrista, The Cardinal Greenway, Historic Washington Street, and the Old West End.

Transportation through the site is dominated by Jackson and Main Streets, which run east and west respectively; and Walnut and Madison Streets, which run north and south.



FIGURE 1-1



FIGURE 1-2

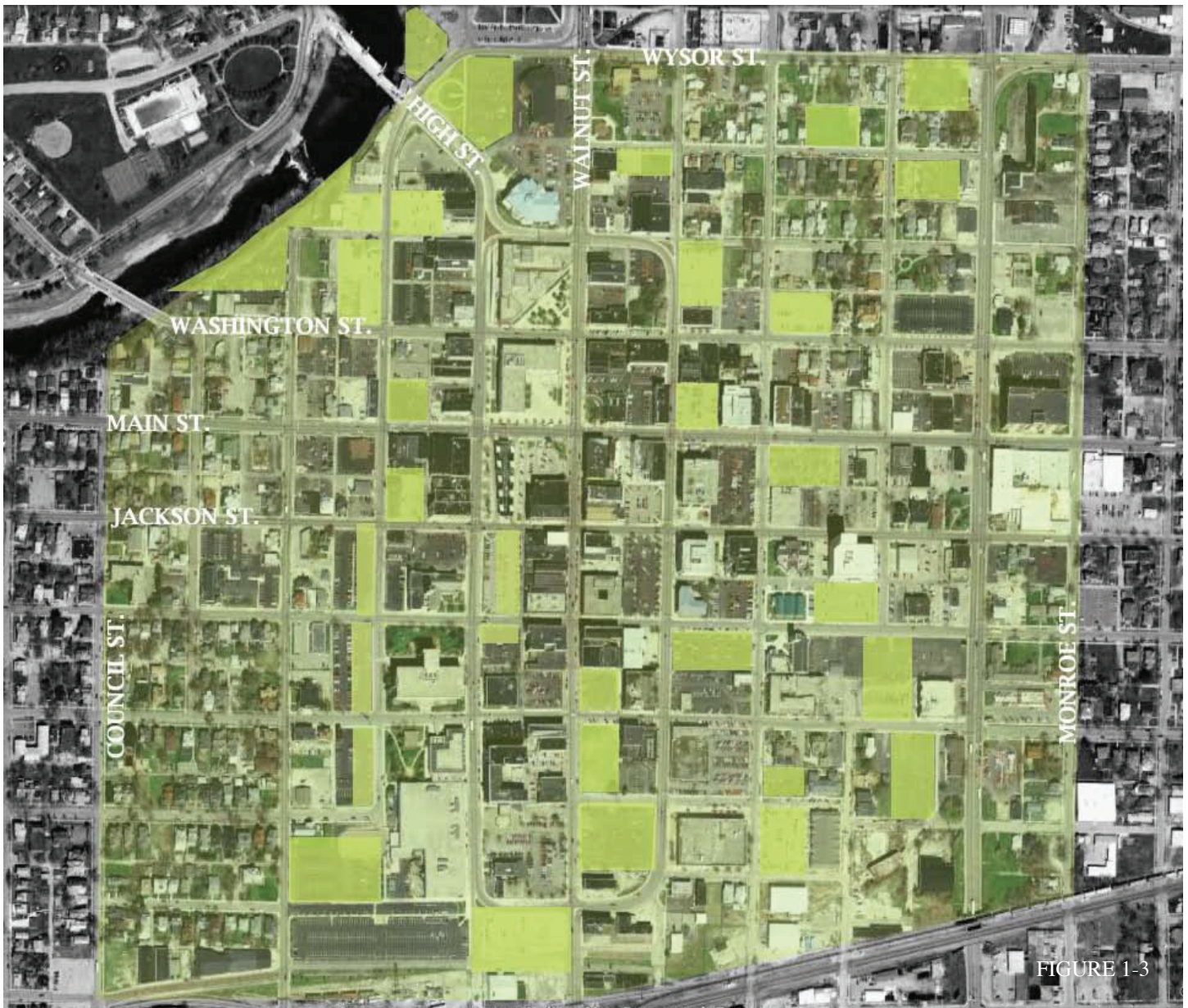


FIGURE 1-3

SITE INVENTORY/ANALYSIS

POTENTIAL REDEVELOPMENT LOCATIONS

Within the established site in downtown Muncie there exist an abundance of under used spaces. These spaces are currently either slab parking lots or abandoned empty lots.

The diagram above, Figure 1-1, identifies the location of such sites that are of a large enough scale to be re-used as a part of downtown redevelopment.

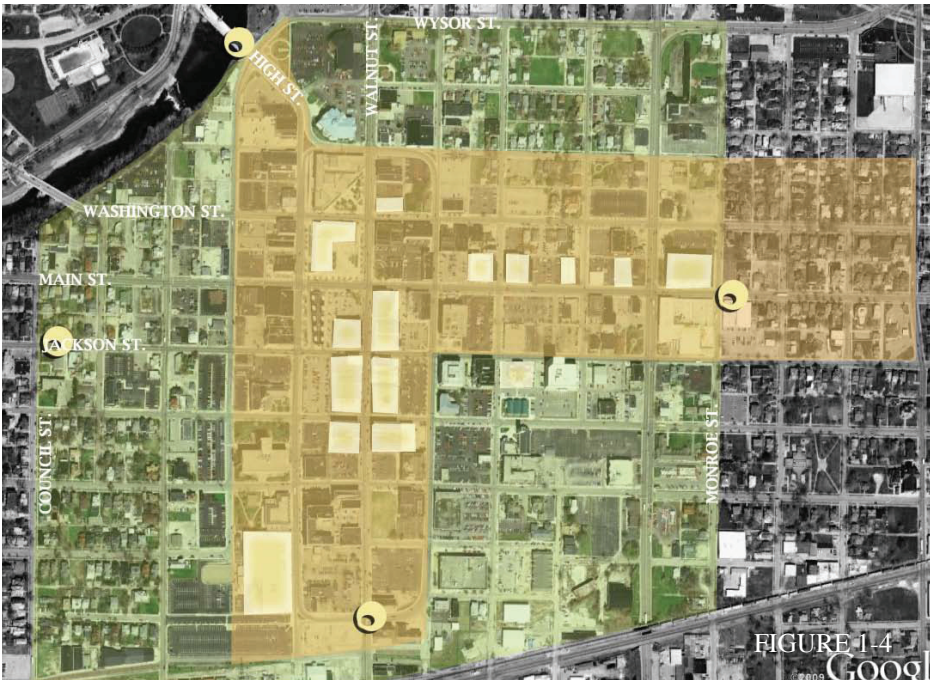
Black zones represent parking lots, and orange designates empty lots.

The redevelopment of these spaces into a network of green spaces provides downtown with a means for pedestrian transportation and destination.

The open space also creates venues for a variety of regional cultural events, both

seasonal and year-round.

Not all established potential spaces are designated for re-use. Some large parking lots are left as is in the interest of centralizing parking and allowing for ease of access.



SITE INVENTORY/ANALYSIS

DOWNTOWN CULTURE DISTRICT

Aside from the existing assets listed in the Site Summary, there are also a number of other cultural resources within downtown Muncie. The city of Muncie has already established a Cultural District. This district is aligned predominantly along Main and Walnut Street (Figure 1-4).

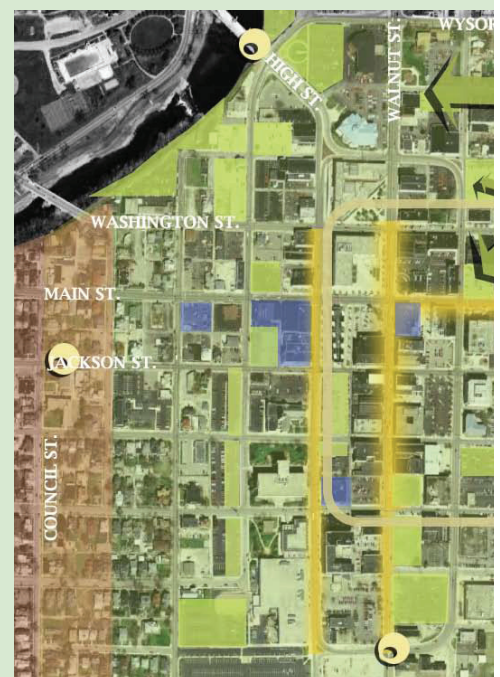
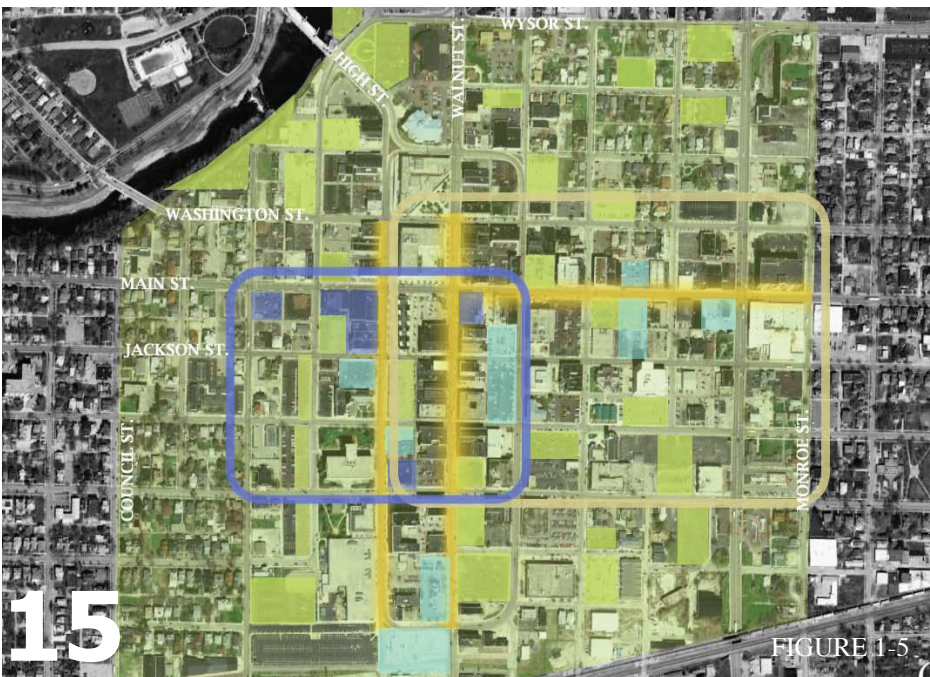
The district is made

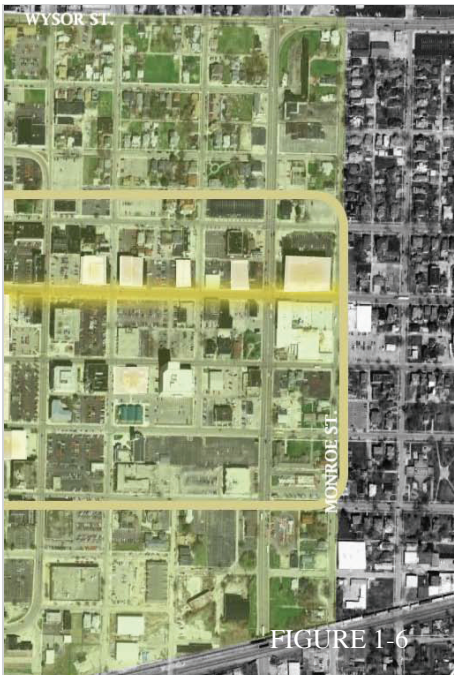
up of important destinations throughout downtown. These range from art galleries that are used during the First Thursday Art Walk, to restaurants, and all the way to social gathering places like the Muncie Civic Theater.

Also important in considering this Cultural District

is the understanding that it helps to establish four key gateways into downtown:

1. North gateway across the High Street bridge.
2. South gateway at the south end of Walnut Street at an existing round-a-bout.
3. East gateway where Main



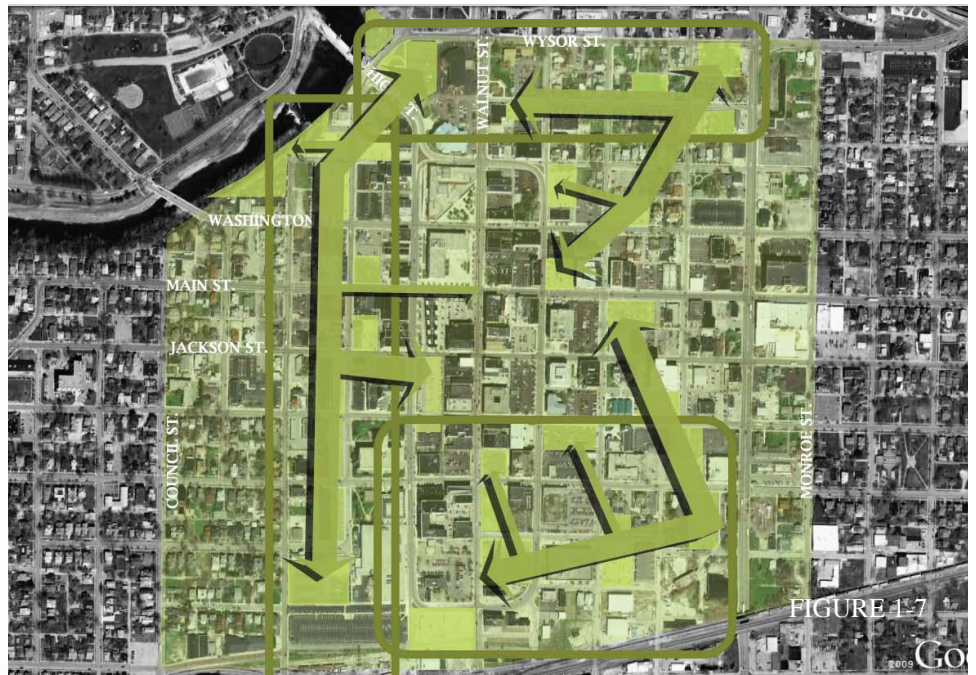


Street enters the site.

4. West gateway where Jackson Street enters the site.

These gateways are important because they connect the downtown site to the regional assets described previously in the Site Summary.

As a result of examining the potentials the Cultural District created, an urban zone emerged. The zone, as shown in Figure 1-6, centers



URBAN/GREEN ZONES

around the confluence of Main Street and Walnut Street. It also includes all but one of the buildings identified in the Cultural District. The urban zone is meant to identify an area in which more dense development is more suitable and where urban agriculture could have a more significant impact given the proximity to a number of restaurants.

In correlation with the urban zone, the Cultural District also led to the development of some green zones (Figure 1-7). These strips of less dense, green space development are meant to serve as a buffer for the urban zone. They also provide easier pedestrian transportation alleys, both around, and through, the urban zone.



CONCEPT DEVELOPMENT

After the completion of the previously described Inventory and Analysis a number of concepts were developed. These concepts attempted to respond to the needs and opportunities as defined by the analysis of the site. Their development and subsequent evolution was the most critical aspect of achieving a successful and appropriate final design solution.

The initial concept focused on the establishment of strictly green space corridors that would circumnavigate the urban zone as previously described (Figure 2-2). Also, these strips of green space would allow for entrance points into the more dense urban core of downtown, as well as, connect it to the surrounding historical districts which include:

1. Washington St. Historic District.
2. Old West End Historic District.

The importance of this connection was seen as the fact that these two residential districts would provide a large user base that would go a long way toward inhabiting and enlivening the designed green spaces.

In return, these green spaces were designed to provide those residents with venues for gathering, and easy transportation alleys into downtown which would revitalize the region as a whole.



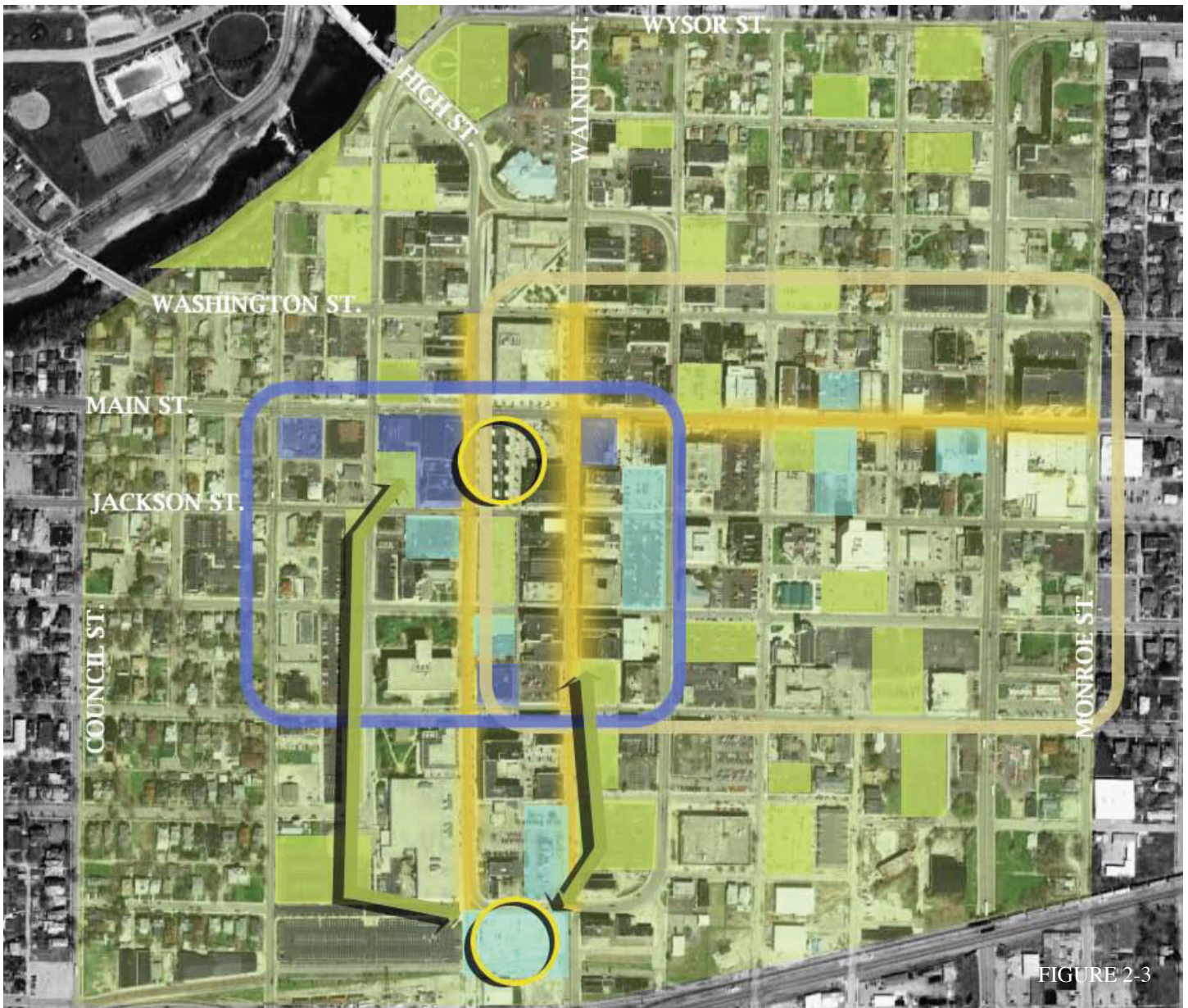


FIGURE 2-3

PART 1: A NEW CONCEPT

After the creation of the first design concept, and the critiques it attracted, it became apparent that there were some major problems that needed to be addressed. For one thing, a major asset in Ivy Tech had been ignored. Ivy Tech has a major presence in downtown Muncie and will have an even larger presence in the near future. Because of this, it is paramount that they be considered in the design.

Also, it became clear that the design could not survive

on the establishment of green space alone. In order for increase pedestrian traffic flow through downtown there needs to be an increased population downtown, which means defining locations for infill residential development.

Figure 2-1 shows the location of Ivy Tech buildings in purple and potential sites for infill in light blue.

Another important thing that was not emphasized in the original concept was the potential for a transit hub at the

southern gateway in proximity to existing railroad tracks. These tracks could, in the future, become an alley for light rail passenger lines. A transit hub at this location would then make downtown Muncie a major stop along this line.

Figure 2-3 shows the location of the hub (the bottom circle) and the need to connect that hub to the existing MITS bus station (top circle).

CONCEPT DEVELOPMENT

PART 2: THE CONCEPT STRIKES BACK

After revisiting the initial concept with its criticisms in mind, a second concept was developed that better responded to all of the analysis and the need for an increased population downtown.

The primary shift that occurred in the development of the second concept was a movement away from pure green space design and more toward a comprehensive community revitalization that included mixed-use infill on top of the establishment of urban green spaces.

This increase in focus on infill served a couple of necessary functions. Like was mentioned above, it solved the problem of a lack of population downtown. If people are wanted downtown, places for them to live, work and shop must exist, and this concept addressed that. More importantly, however, this new focus on including infill also largely increased the dynamics of downtown. Suddenly, instead of moving pedestrians through only green space and along streetscapes, diverse environments were created in which plazas and alleyways between buildings emerged. Now pedestrians still had the ease of transportation throughout downtown, but on top of that they were given a variety of spaces with an entire range of qualities including:

1. Scale
2. Texture
3. Transparency
4. Sight Lines
5. Building Facades
6. Sun/Shade

The true establishment of an Ivy Tech campus is another strength of this concept. By creating a green corridor that leads from the transit hub and dead ends in a substantial green space

surrounded by Ivy Tech buildings, the students can really feel like they have the kind of quad space that any college student would expect.

In Figure 2-4, Ivy Tech buildings are designated in purple, mixed infill development is shown in a dark aqua blue, and within green spaces urban agriculture is identified with a tinge of orange.



FIGURE 2-4

CONNECTIONS

Similar to the initial concept, urban and green connections played a very important role in the design philosophy behind the second concept. As is shown in Figure 2-5, the additional infill allows for much more streetscape connections between what have emerged as more articulated urban zones. While the original concept relied on one urban zone along Main Street and Walnut Street, this concept diversifies that to include High Street, and a couple of clustered urban areas labelled as the Northwest Development.

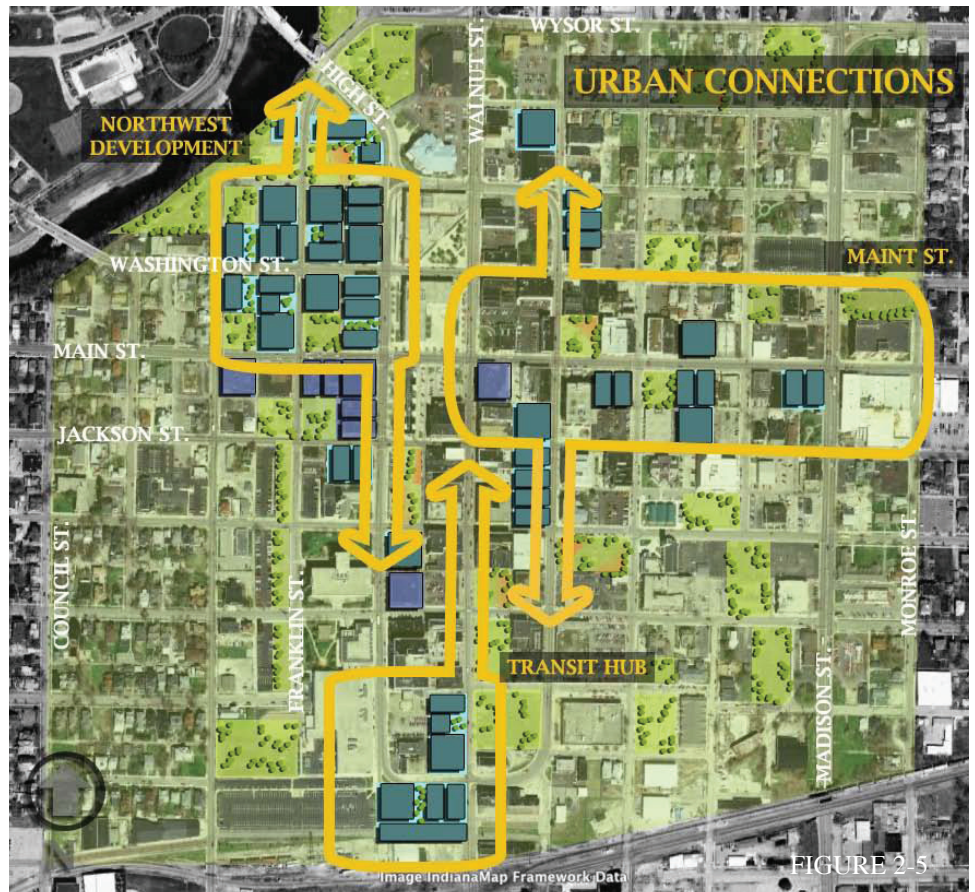


FIGURE 2-5

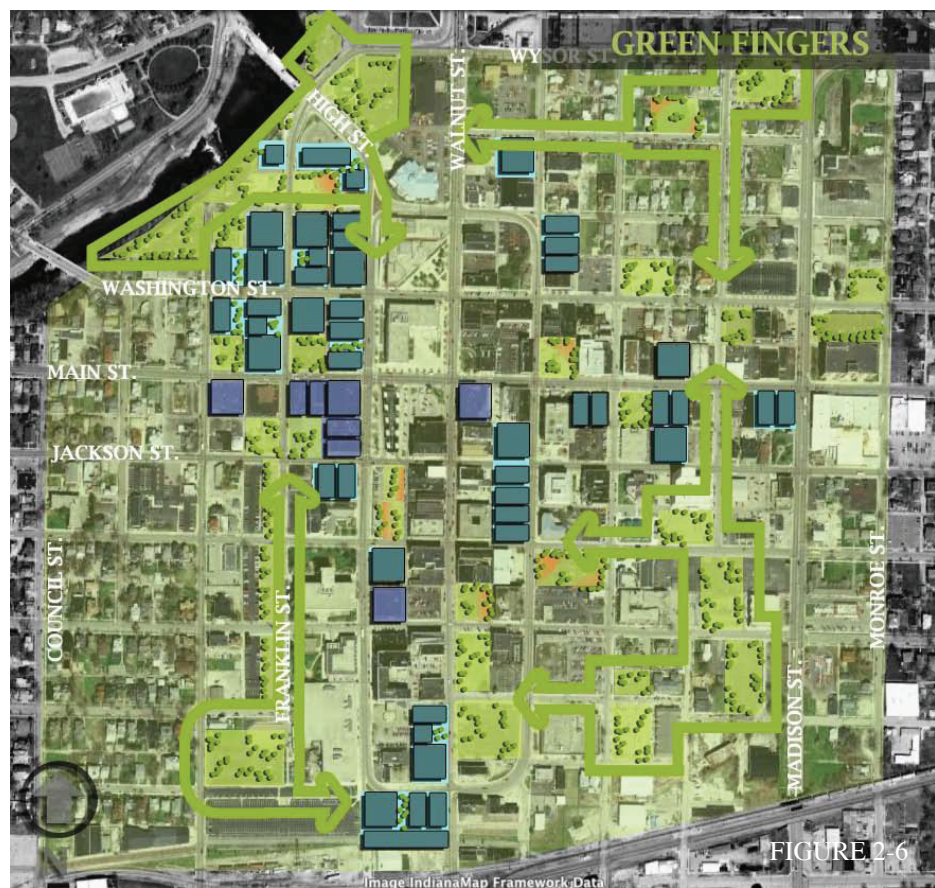


FIGURE 2-6

GREEN SPACE CONNECTIONS

Another substantial addition is the creation of a riverfront park along the White River in the northwest corner of the site (Figure 2-6). This substantial green space does much more to create a gateway along the northern boundary than existed in the first concept.

CONCEPT DEVELOPMENT

The urban and green space connections established in the second concept led to the discovery of a number of transition spaces (Figure 2-8).

These transition spaces occur where urban and green zones meet, and where similar zones come together. These spaces are the particularly interesting locations within this concept.

Because of the dynamics of these transition spaces, the site scale design work for this project will occur in a number of them.

The transition spaces identified as particularly interesting are:

1. Northwest Development
2. Ivy Tech Campus
3. Washington Street Gateway
4. Transit Hub
5. Urban/Green Space Transition Area.

Of these five identified transition areas the two that will garner the most attention and design effort are the Northwest Development and the Transit Hub. By focusing on these two areas, not only can gateways to downtown be addressed, but a certain symmetry and completeness of design can be achieved by detailing locations at the far north and south ends of the site.



FIGURE 2-7



FIGURE 2-8

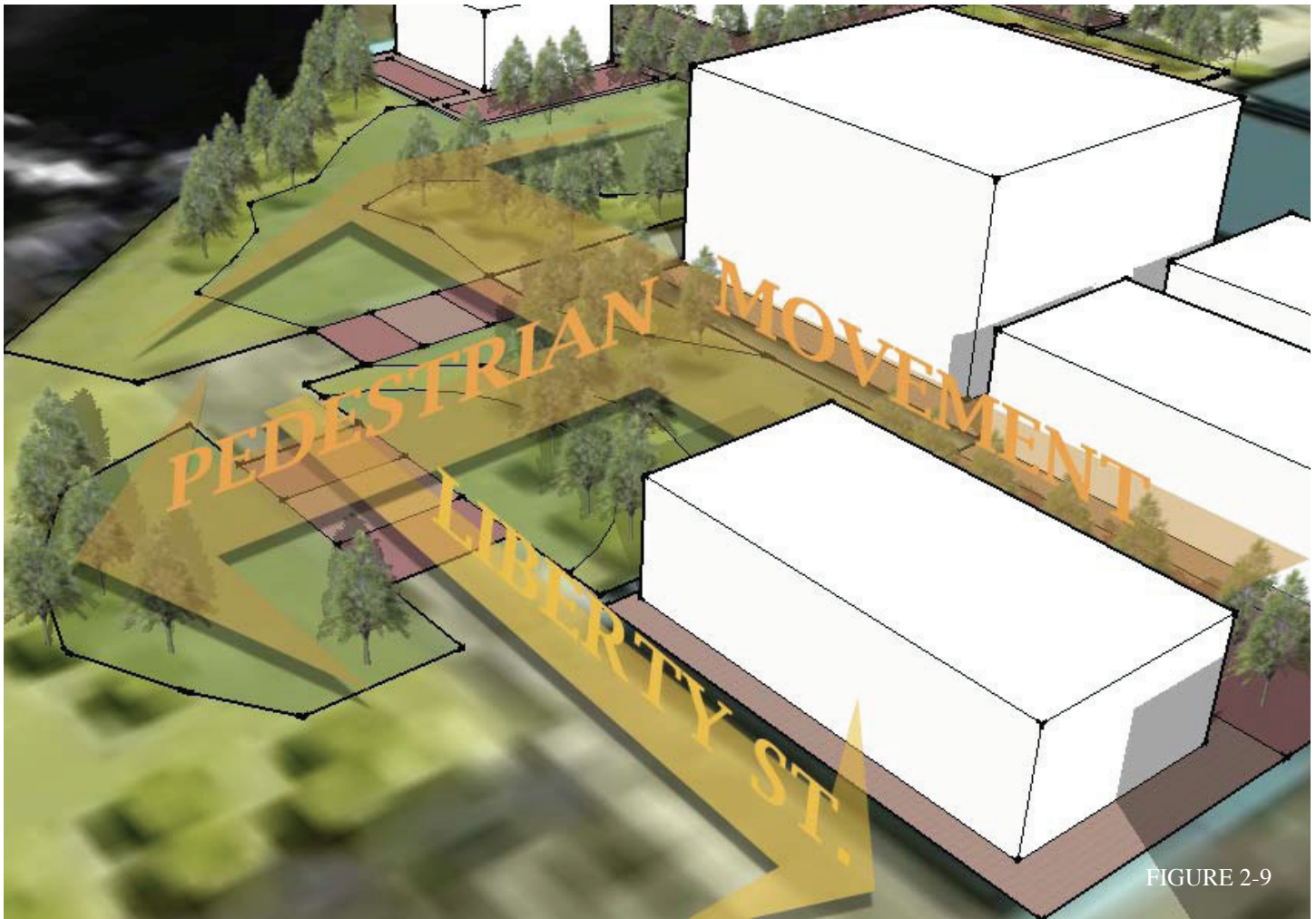


FIGURE 2-9

NORTHWEST DEVELOPMENT

Within the Northwest Development the relationship between multi-use infill and green space development is designed intentionally to create an environment in which the movement of the pedestrian takes precedence over vehicular circulation.

Figure 2-9 shows such a condition at the bend in Liberty Street along the southern bank of the White River. In this example pedestrian alleys and accented street crossings create an environment where the driver must always be aware of

pedestrian movement, and the pedestrian is allowed to move more freely and not in constant contact with the street.

IVY TECH CAMPUS

A similar situation is created for the primary green space located in the Ivy Tech campus. The confluence of green spaces and corridors moves the pedestrian away from the street. However, when crossing the street is necessary a change in paving and a slightly elevated plane make the mid-block crossings more safe and convenient (Figure 2-7).

CONCEPT DEVELOPMENT

The third stage in concept development focused more intently on pedestrian circulation and considering the pedestrian before the vehicle in every phase of the creation of the design.

More detail was put into the various outdoor spaces throughout downtown. Substantial mixed-use infill created a number of intermediate spaces. The difference in this concept was the fact that many of the spaces are designated as hardscape transportation alleys (Figure 2-10). Some of the destinations became hardscape plazas as well. This combination of hard and soft landscape creates a much more interesting network of spaces.

A northern gateway was also created in more depth for this concept. The riverfront park mentioned earlier became a much more concrete concept in this iteration and a

connection was created across the White River to Tuhey Park.

Earlier analysis overlooked the potential asset that Tuhey Park could become for downtown Muncie. The fact that it is slated for major redevelopment into a water park makes it a connection that should not be ignored. By connecting across the river to Tuhey Park, this concept

benefits from a stronger north end connection to the surrounding context.

Another major addition to the Northwest Development in the third concept is the creation of a traffic circle just south of the High Street bridge. The round-a-bout would serve as a gateway feature for the north end of downtown. It would also be a traffic calming feature that is buffered on all sides by usable green space. This would introduce drivers to the change in atmosphere that downtown Muncie would represent.

A final addition to this concept is the redevelopment of the county jail into a mixed-use, commercial development. In this case, the block containing the jail which is located just north of the County Courthouse would be totally re-invisioned. The jail would be removed and the entire block would be redeveloped. This removes a serious eye sore, and negative aspect of the northern portion of downtown.

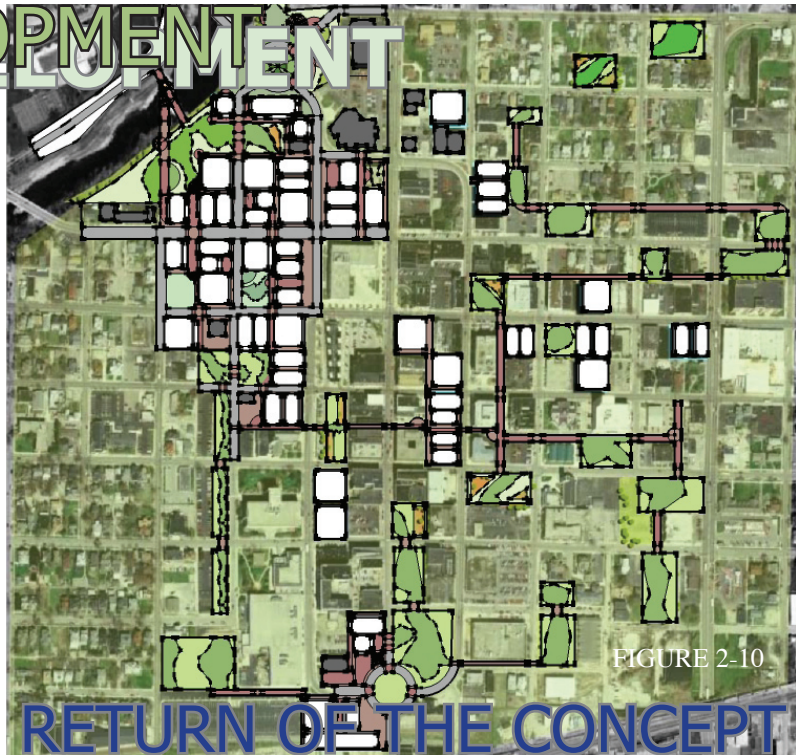
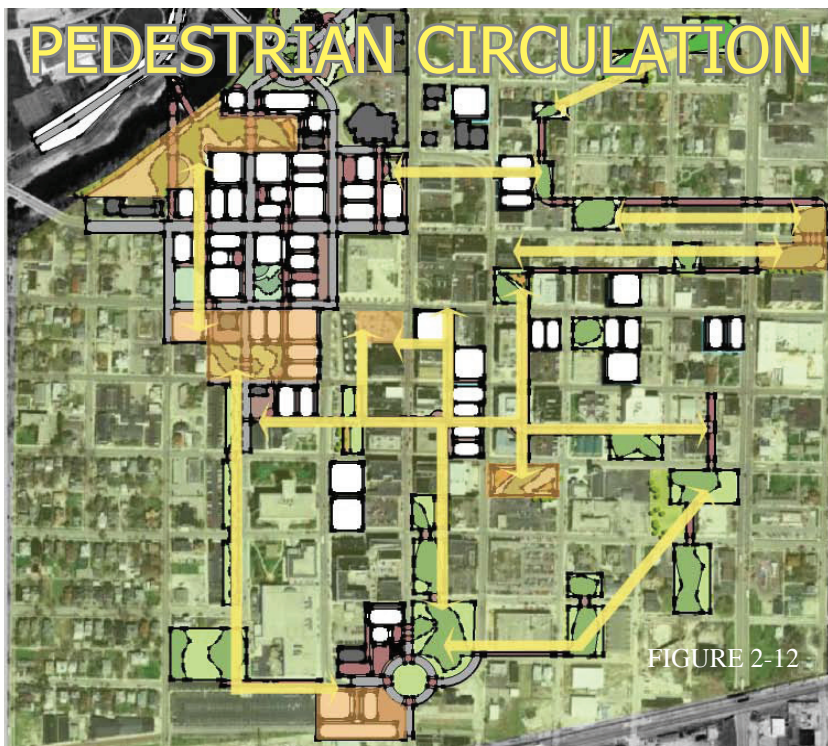


FIGURE 2-10

PART 3: RETURN OF THE CONCEPT



FIGURE 2-11

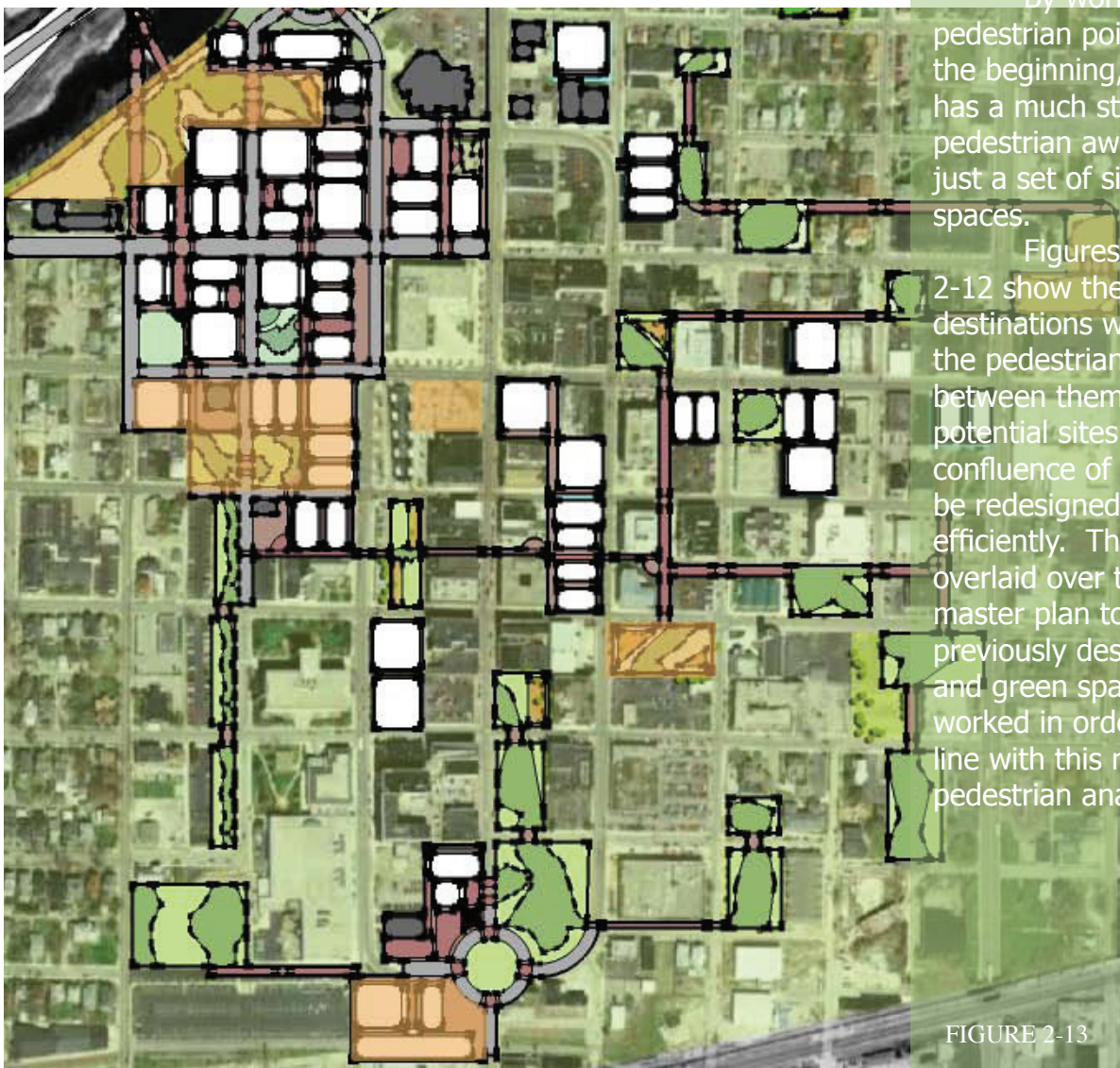


Because pedestrian circulation is so important to the success of this design it is important that pedestrian scale be the primary consideration through all phases of the design.

Earlier concepts had started by analyzing what sites were available and then designating green spaces based on those available sites. For this concept the entire process was looked at from a pedestrian perspective. The first step became looking at where informal pedestrian circulation already existed with the goal being to create spaces that aid in that transportation.

By working from the pedestrian point of view from the beginning, this concept has a much stronger sense of pedestrian awareness and not just a set of sidewalks and open spaces.

Figures 2-11 and 2-12 show the various destinations within downtown, the pedestrian access alleys between them, and the potential sites where the confluence of those alleys could be redesigned to work more efficiently. That network is then overlaid over the conceptual master plan to look at how previously designed corridors and green spaces could be re-worked in order to be more in line with this new method of pedestrian analysis.



CONCEPT DEVELOPMENT

With the discovery of the necessity to connect with Tuhey Park came a much larger emphasis on the design of a river front park along the southern bank of the White River (Figure 2-12).

This large green space works in coordination with substantial mixed-use development and the vehicular gateway at the High Street bridge. The green space is bordered on multiple sides by ground level storefronts. These allow the creation of a space that is constantly active. Not only will people move through the space on their way further south through downtown, but they will also inhabit the space by moving in and out of the various stores and commercial spaces.

The green space can also serve as outdoor seating for restaurants. This adds to the population that would inhabit the space instead of simply moving through it. The key to successful urban spaces is a mix of people moving through the space and people stopping in the space for a longer period of time. By surrounding this river front green space with commercial storefronts this sort of stop and start relationship is more evident. Due to this, more people will be in the space more often, and that will lead to a space that is dynamic and also a perfect gateway into a downtown that has a whole new identity.

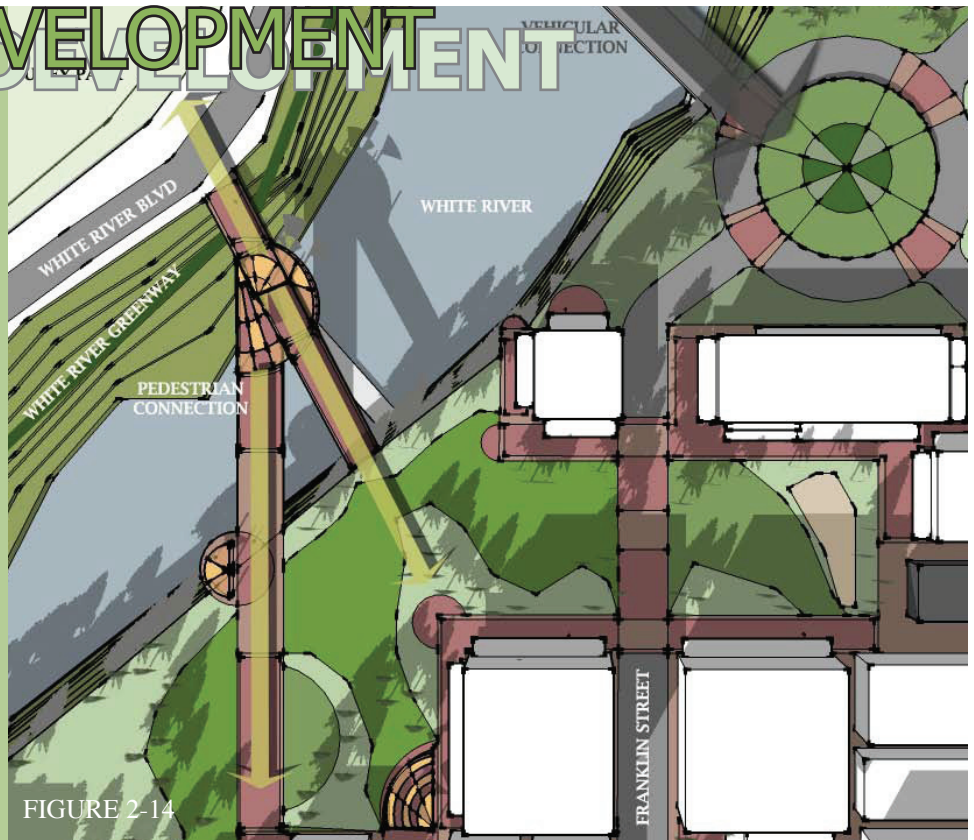


FIGURE 2-14

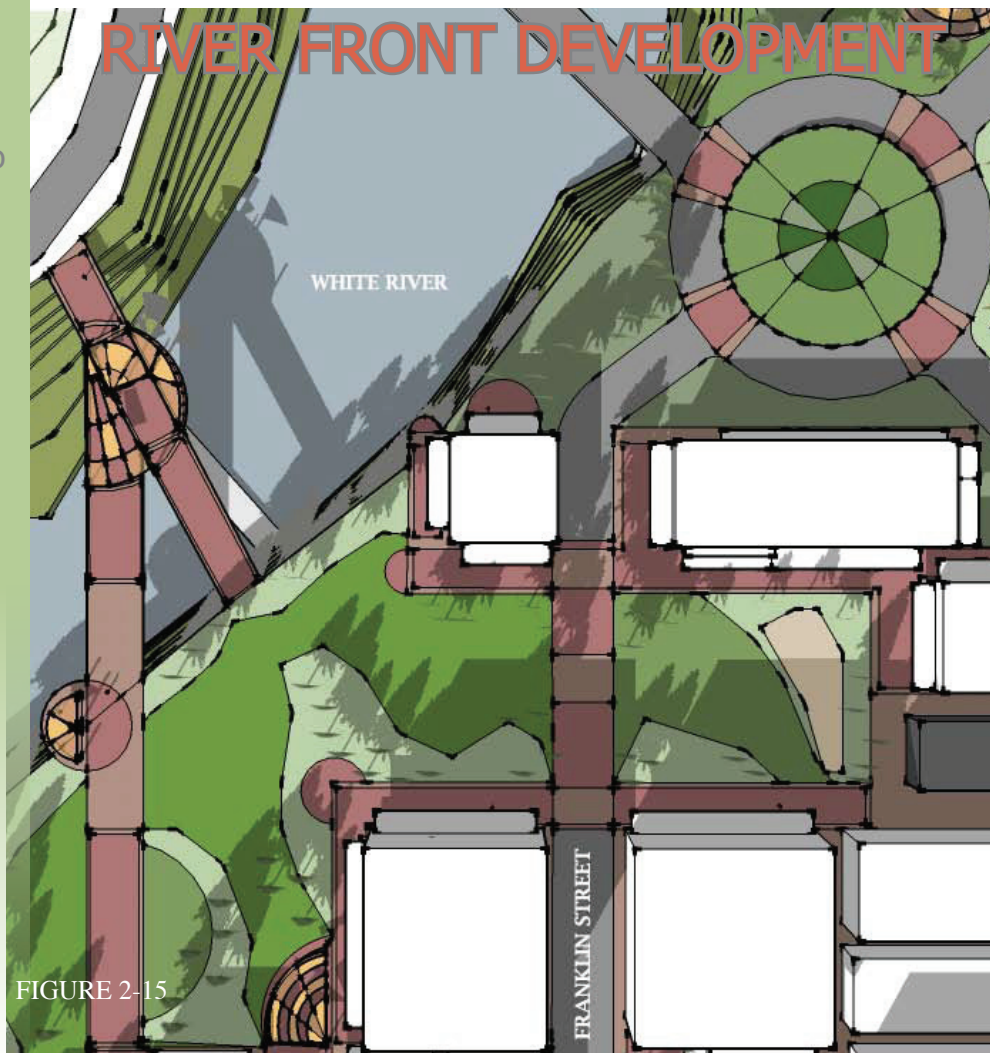


FIGURE 2-15

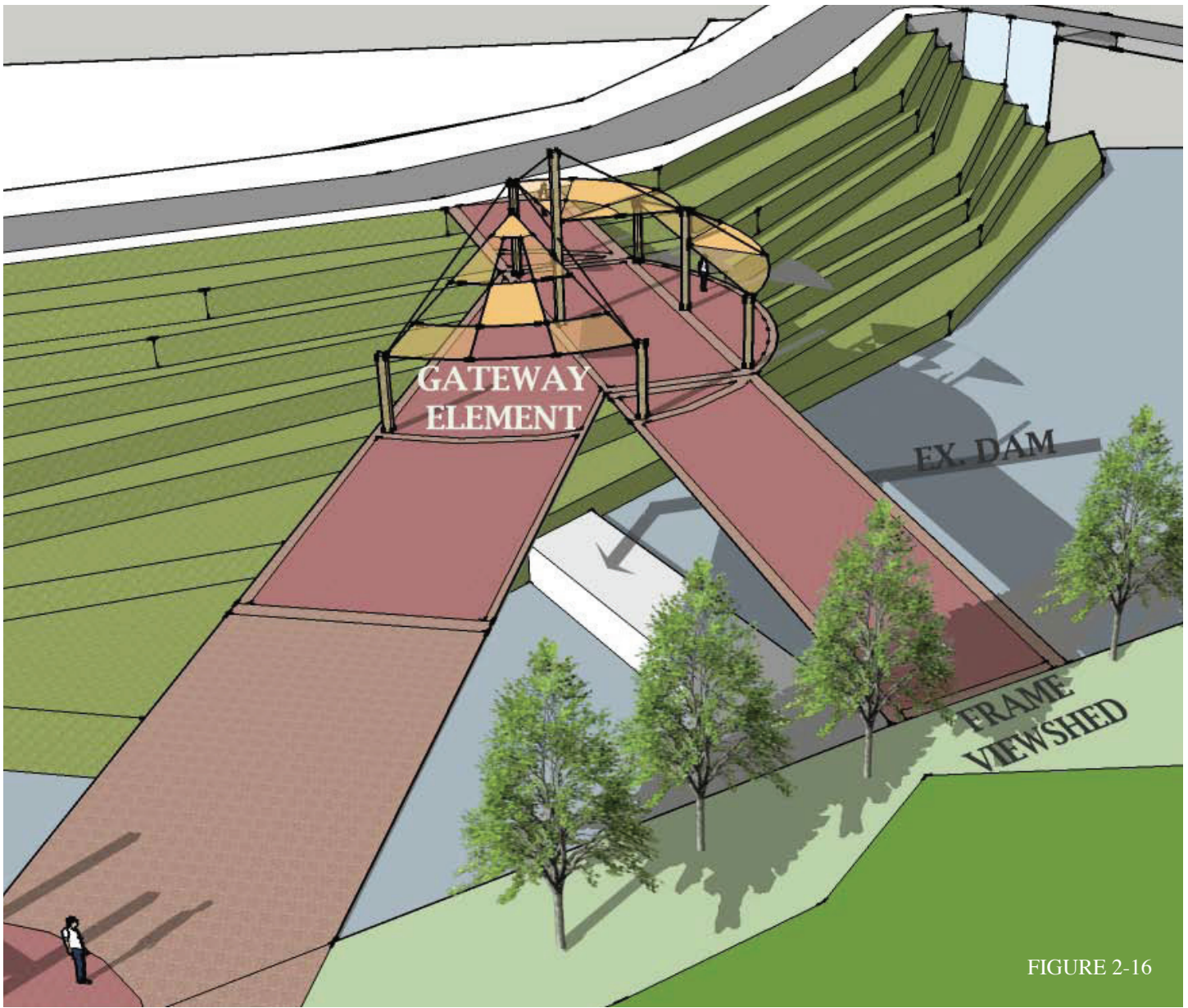


FIGURE 2-16

TUHEY PARK CONNECTION

The necessity to connect to Tuhey Park has already been described, but this concept includes some more concrete design ideas on how to achieve that. While a round-a-bout can serve as a substantial event for the automobile driver, it does very little for the pedestrian. Because of that, this concept separates the pedestrian's access to downtown from the High Street bridge. In order to do this a pedestrian bridge was created that creates a direct

line across the White River from Tuhey Park to the water front park described on the facing page (Figure 2-14).

This pedestrian bridge is not only a physical connection, but also serves as a pedestrian gateway into downtown. A shade element in the middle of the bridge creates a stopping point and frames views both north and south; and down the river (Figure 2-16).

By creating a pedestrian access directly between Tuhey Park and the river front park

movement between the two can be much more fluid, without the need for the automobile. Families spending the day at the water park, for example, could easily walk across the bridge and get lunch in the river front park. This simply adds another dimension to the dynamics of this northern gateway into downtown.

FINAL DESIGN SOLUTION

The final design solution is the result of an evolution of the first three concepts, plus the addition of an establishment of a variety of districts (Figure 3-1). These districts are locations where particular attention was paid to site scale character. These districts are what make the design of the new downtown Muncie dynamic and diverse. The relationship between these districts is the most important aspect of this final design solution. The six districts include:

1. Tuhey Park
2. Riverfront Park
3. South Bank Development
4. Muncie Town Square
5. Ivy Tech Campus
6. South End Transit Hub

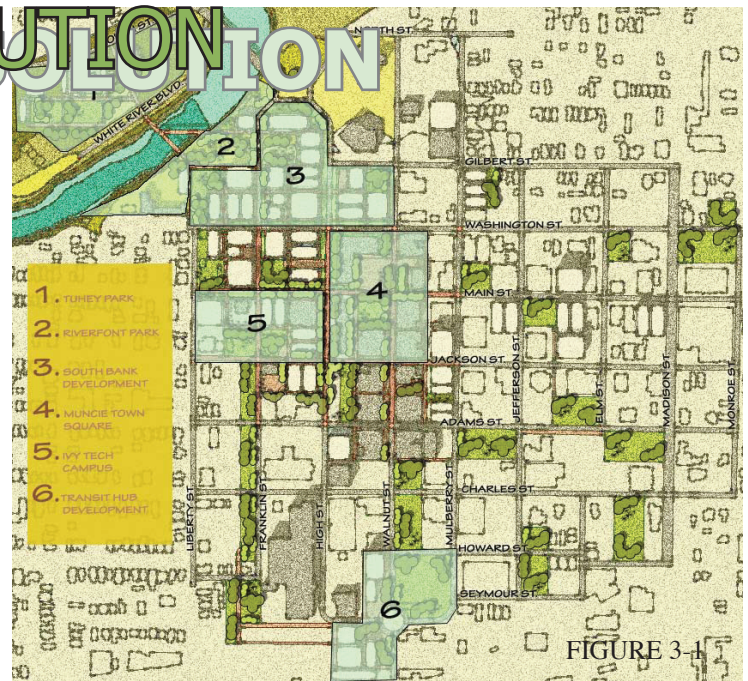


FIGURE 3-1

MASTER PLAN DISTRICTS

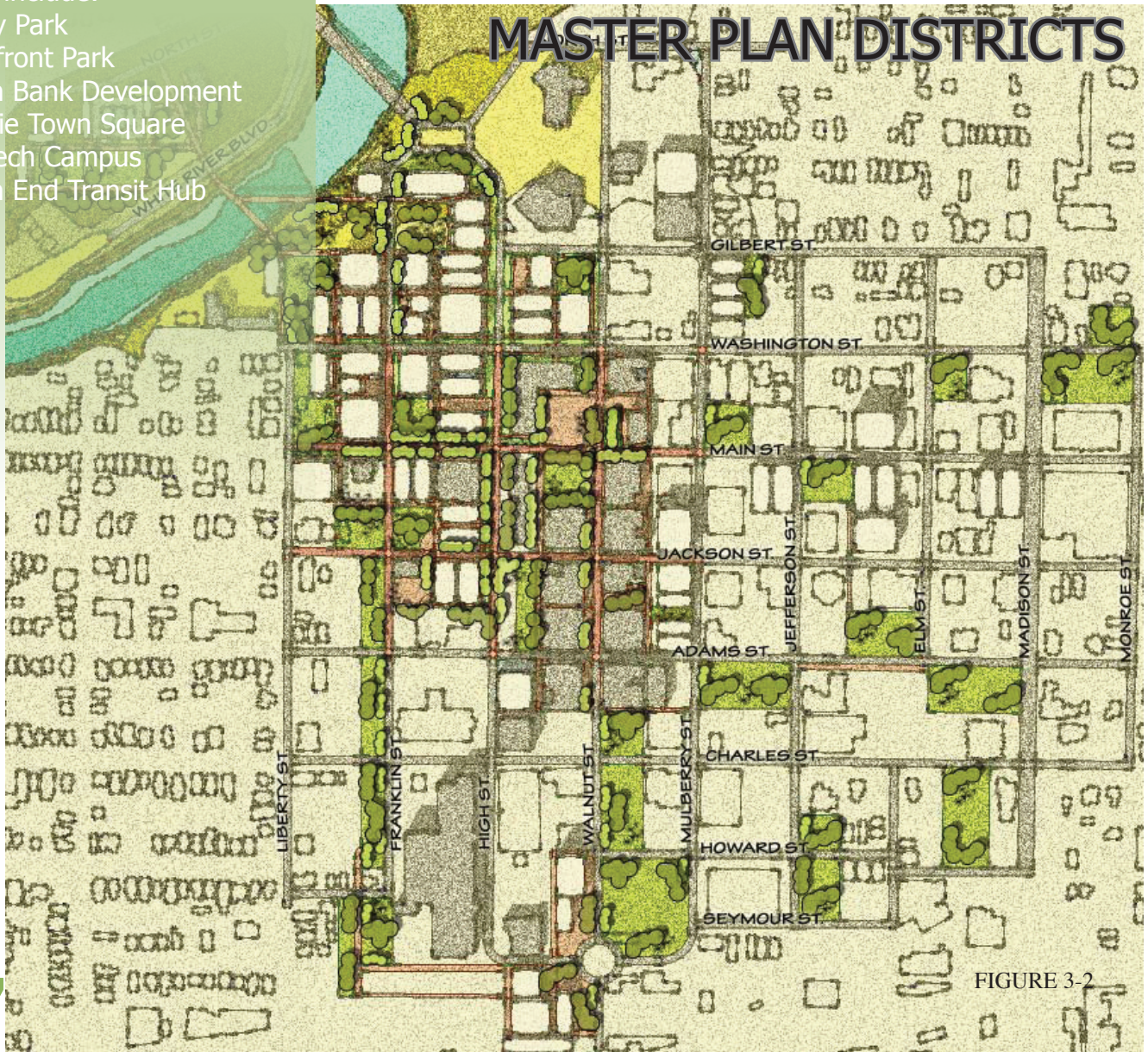
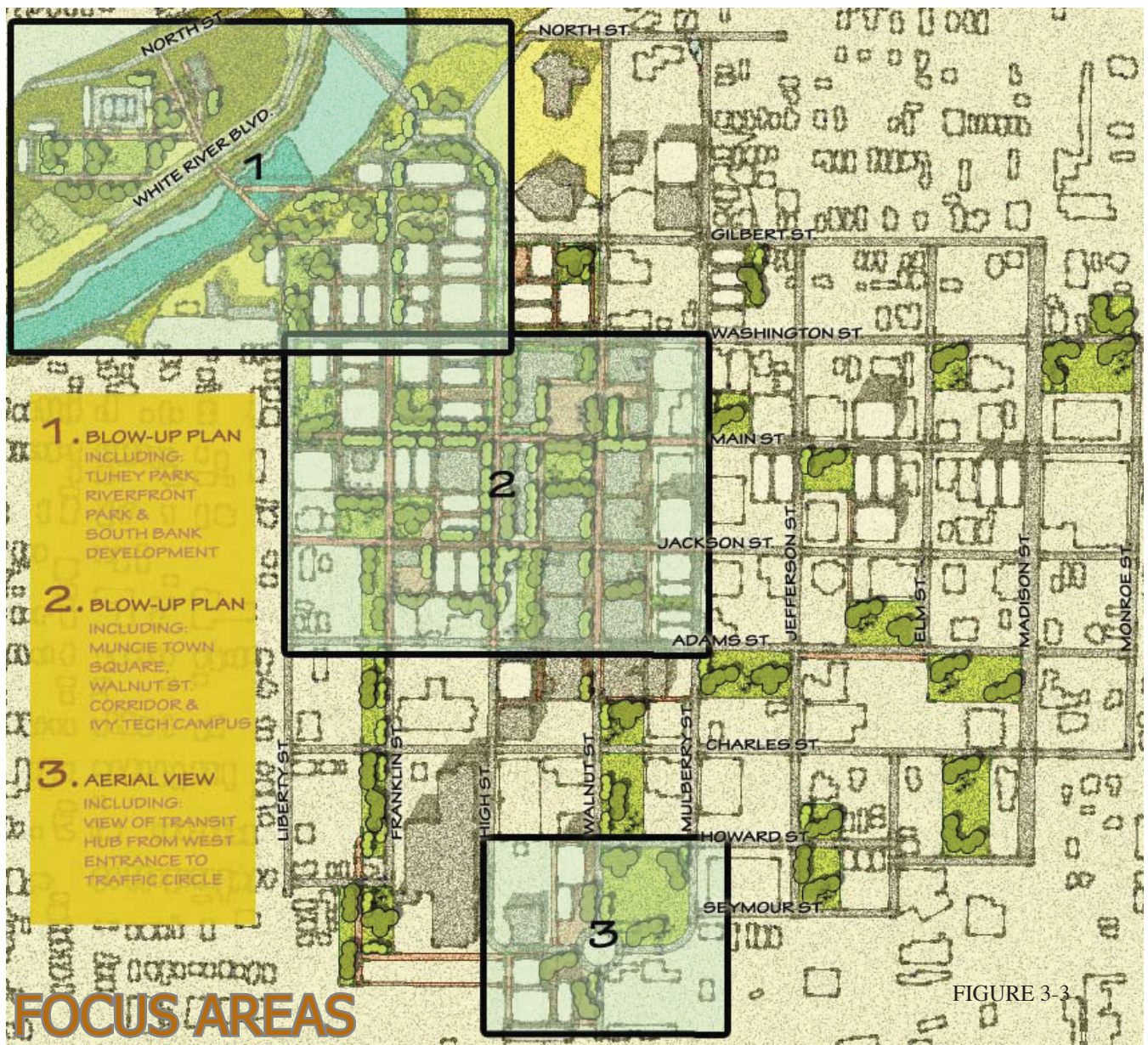


FIGURE 3-2



The establishment of districts in downtown also led to the discovery of a handful of spaces that warranted further design attention. These sites became focus areas where site scale design was necessary to fully develop spatial characteristics (Figure 3-3). The three focus areas that eventually became the most interesting and potentially important to the master plan as a whole are:

1. Blow-up Plan of Tuhey Park, Riverfront Park and South Bank Development
2. Blow-up Plan of Muncie Town Square Walnut Street Corridor Ivy Tech Campus
3. Experiential view of the South End Transit Hub

These focus areas are the final iteration of transition spaces that were established in the very first concept. These spaces are the most important to the image of downtown Muncie because they are where the different districts come together and, therefore, are the places where the most interesting things are happening in the creation of effective outdoor pedestrian space.

FINAL DESIGN SOLUTION

The first focus area is that region that surrounds the White River just south of the High Street bridge (Figure 3-4). One of the keys to this area is the connection between the Riverfront Park and Tuhey Park. As Tuhey Park gets redeveloped it will become a substantial asset to users of downtown. Due to this, there is a huge opportunity to increase the population of users on the downtown side of the river. All that is needed to take full advantage of this relationship is a solid pedestrian connection that bridges the White River.

In this case, that bridging is taken quite literally through the creation of a pedestrian bridge that directly connects Tuhey Park with the Riverfront Park and South Bank Development (Figure 3-5).

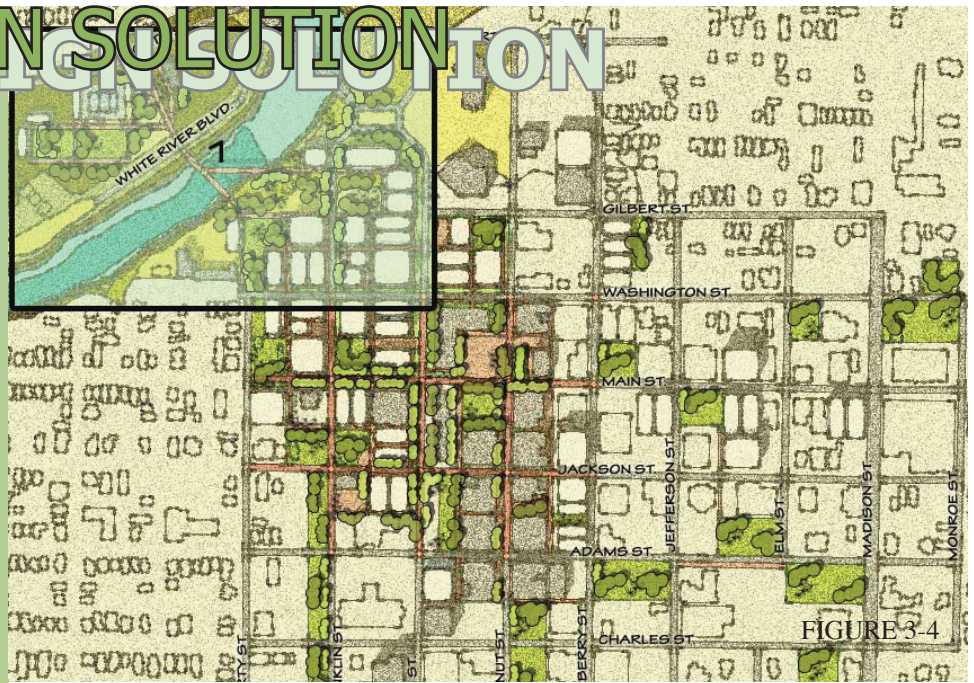


FIGURE 3-4

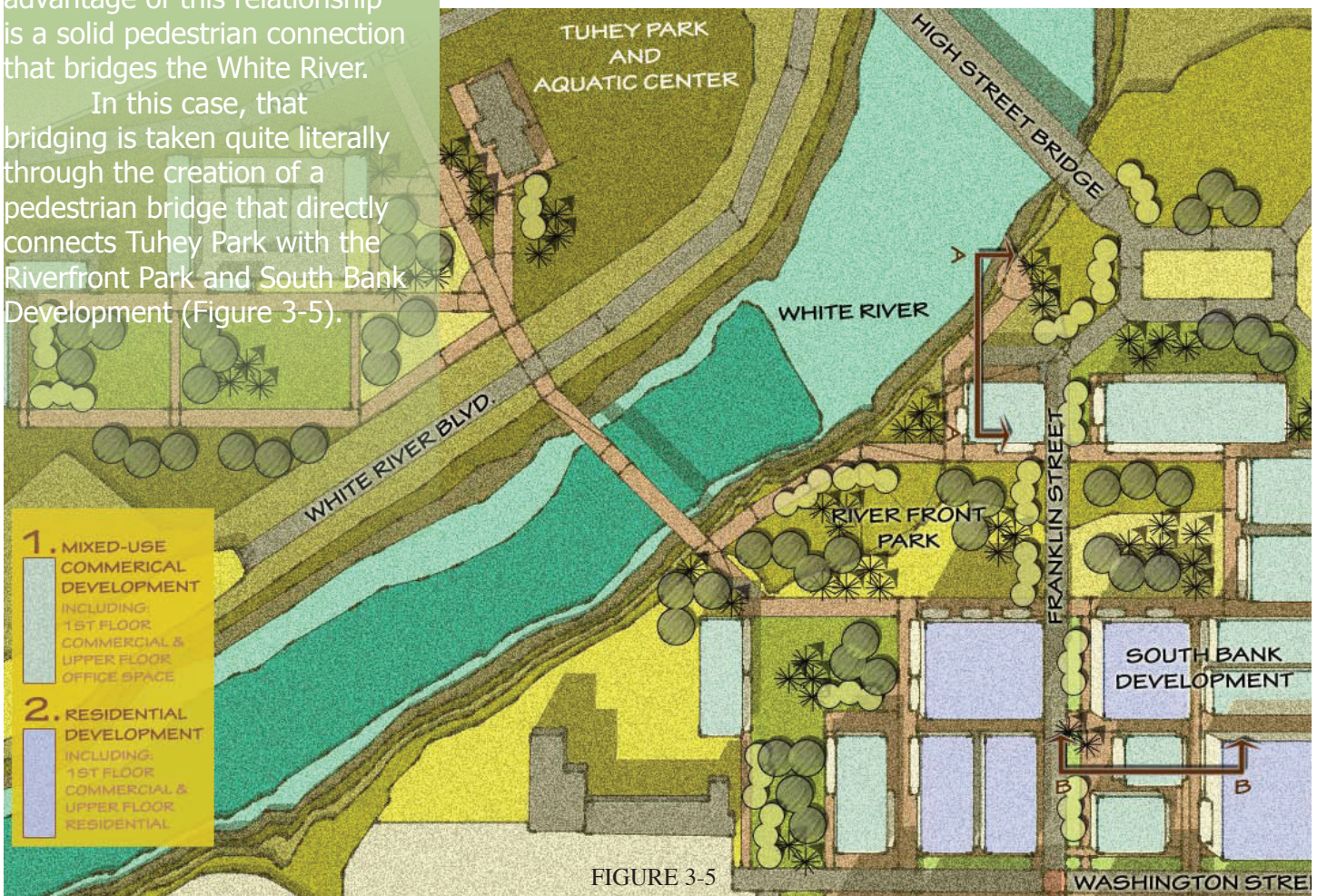


FIGURE 3-5



FIGURE 3-6

RIVERFRONT PARK/SOUTH BANK DEVELOPMENT

The Riverfront Park/South Bank Development area creates downtown's first substantial green space resource. The combination of large green space and small scale retail areas creates a "Shopping Village" within downtown. This village is just the kind of marketable image that is necessary to re-brand downtown Muncie (Figure 3-6).

The connection to the new Tuhey Park also goes a long way toward creating a

consistent population for the Riverfront Park and South Bank Development. There exists no better relationship than that of an all day family destination and a collection of restaurants and shops connected to outdoor picnic locations.

This relationship exists with Tuhey Park and the South Bank Development. Families who take all day trips to the Tuhey Park Aquatic Center will have easy access to lunch and dinner opportunities housed in

the South Bank Development. They will also have plenty of space within the Riverfront Park to sit out under the sun or in the shade of a large oak tree to eat before returning to Tuhey Park.

By creating a brand-able "Shopping Village" image and connecting to Tuhey Park, the Riverfront Park and South Bank Development become the face of downtown Muncie, and an ideal northern gateway.

FINAL DESIGN SOLUTION

The second focus area is located more in the middle of downtown and encompasses the new Muncie town square and Ivy Tech Quad, as well as, the existing Walnut Street Corridor (Figure 3-7).

Currently, Muncie is lacking a town square feature in downtown, an element which is so common in communities of similar size around the Midwest. The creation of a town square that includes the Delaware County Courthouse, the MITS bus depot and the northern extent of the Walnut Street commercial corridor will do a lot to create a venue that anchors the middle of downtown (Figure 3-8).

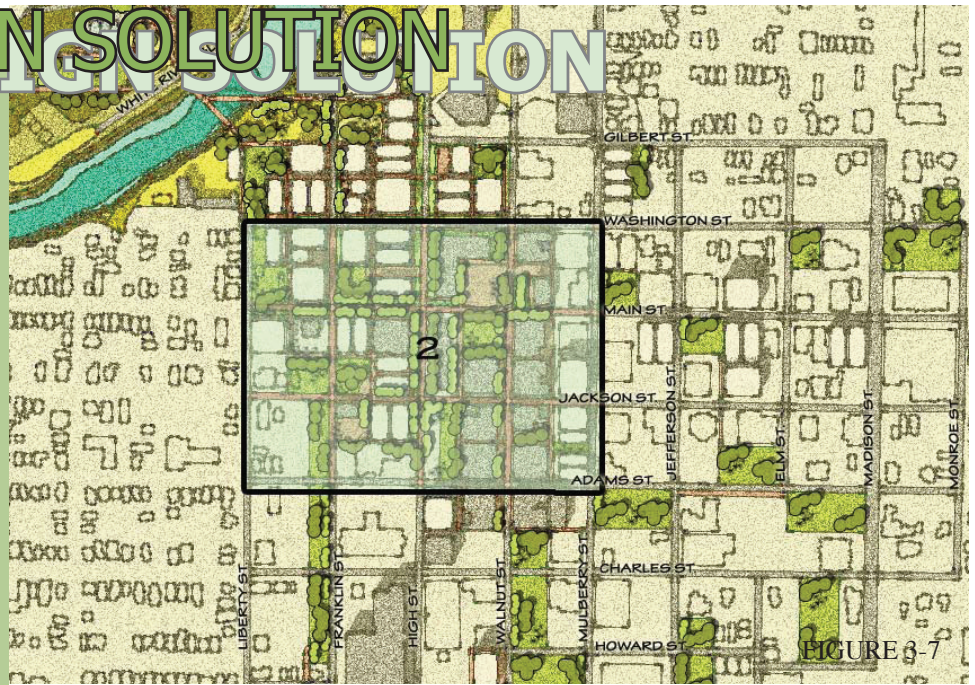


FIGURE 3-7

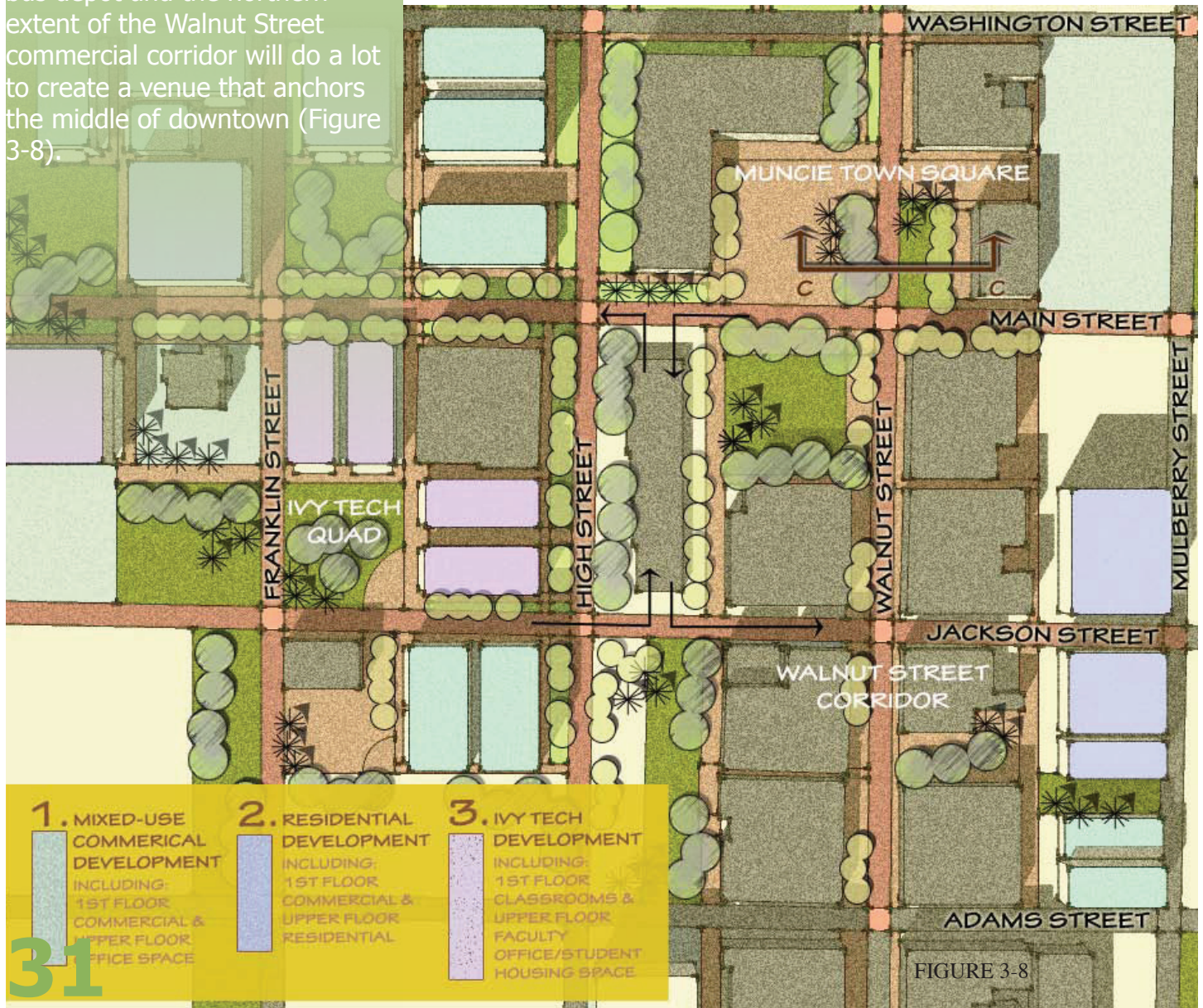


FIGURE 3-8



FIGURE 3-9

MUNCIE TOWN SQUARE/IVY TECH QUAD

In addition to the square itself, its connection to a created Ivy Tech quad increases pedestrian foot traffic and makes it even more of a destination.

As Ivy Tech expands to inhabit more buildings downtown, there will be a much larger demand for a common green space in which students can gather. This Ivy Tech quad will also give students a more traditional campus feeling that Ivy Tech institutions traditionally

lack. By creating this quad in proximity to the new town square a number of things will be achieved:

1. Ivy Tech students will have a place to gather for organized and informal events.
2. Community interaction with Ivy Tech will be increased.
3. A large population (Ivy Tech students) will constantly be inhabiting both spaces.

This spatial partnership will establish a strong anchor in the center of downtown that will act as a midpoint between the northern gateway at the Riverfront Park, and a southern gateway at the Transit Hub.

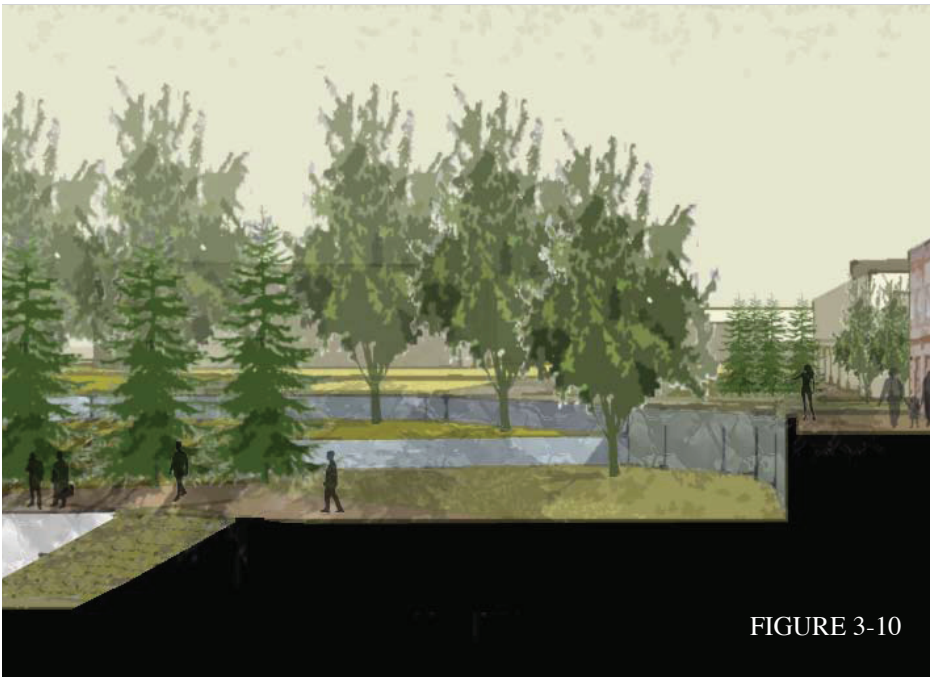
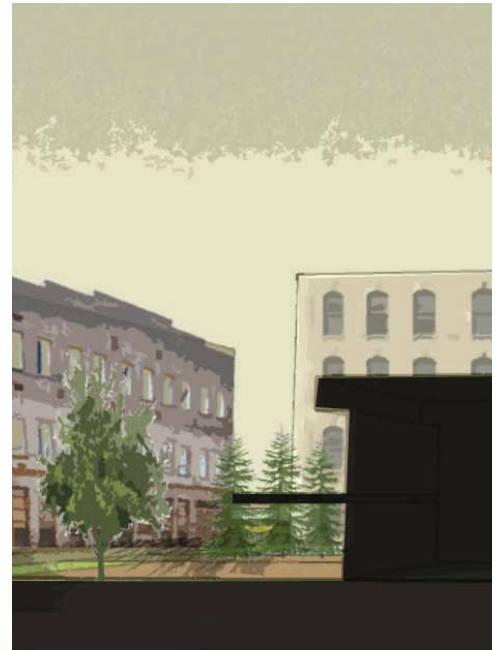


FIGURE 3-10



FINAL DESIGN SOLUTION

Section A-A (Figure 3-10) shows a river walk and series of pedestrian alleys that make the northern part of downtown Muncie a very interesting place to enjoy the outdoors.

Along the river, a walk that is terraced down from its surroundings allows for quiet green space that is protected from the noise and activity of

High Street and the Southbank Development. This space serves as a necessary escape, as well as, an outdoor venue for adjacent restaurants and markets.

Section B-B (Figure 3-11) displays a typical two fronted commercial building. This building has a store front on both a pedestrian alley,

and on street frontage. This not only gives the store double exposure but allows for ease of movement for the pedestrian. Users can easily move from streetscape to alleyway through various commercial units. This increases traffic for store owners and makes the experience more interesting for the shopper.

Section C-C (Figure 3-12)





FIGURE 3-11

illustrates how reworking the open space in front of the County Courthouse completes the establishment of a town square. By allowing the topography to step down to the street, the space extends across to the green space opposite it. Also, seating and space for informal gathering is created on the over-sized steps where an amphitheater like space emerges.



FIGURE 3-12

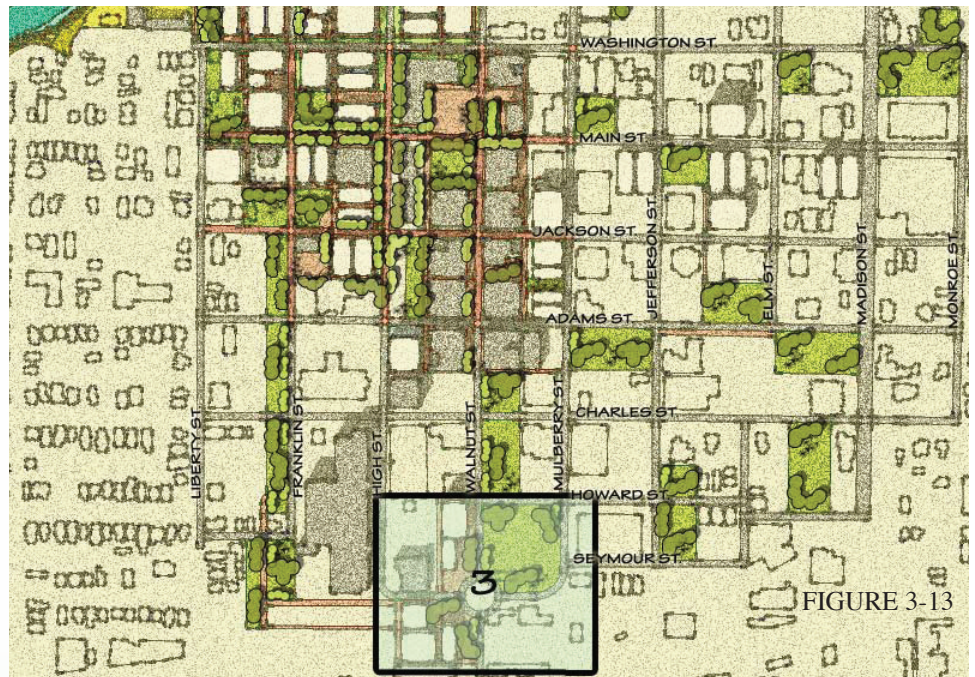


FIGURE 3-13

TRANSIT HUB

The final focus area examines the Transit Hub that will become the southern gateway to downtown (Figure 3-13).

The point of the Transit Hub is to reach out to residents of southern Muncie, as well as, potential users that could be passing through on a newly established light rail system running along the existing rail corridor at the southern reaches

of downtown. This hub will have all the characteristics of the rest of downtown and will act as a small example of what people can expect should they choose to further explore the area (Figure 3-14).

Where the Southbank Development draws people in from across the White River, the South Transit Hub will draw people in from across the tracks and further make downtown desirable and accessible to everyone.

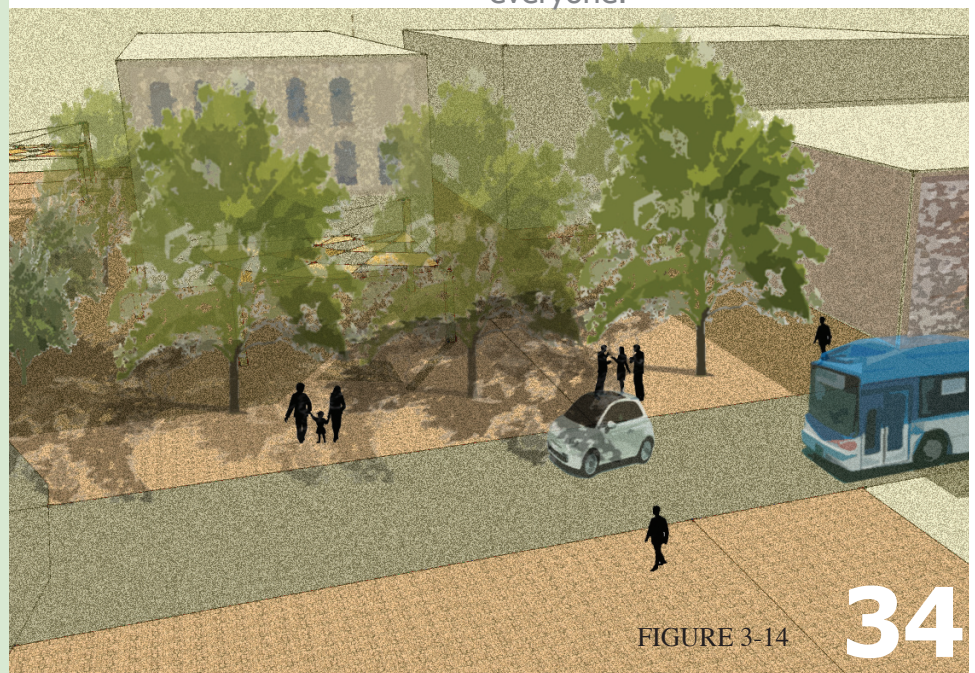


FIGURE 3-14

FINAL DESIGN SOLUTION

Because many of the pedestrian alleyways also need to be accessible to emergency vehicles and occasional service vehicles, it is necessary to appropriately detail the unit paving to handle those loads (Figure 3-15).

The use of unit pavers on a sand sub-base also increases the pervious nature of the paving. This reduces the amount of stormwater runoff that so much paving could create.

The combination of brick and concrete adds an interesting contrast in texture, as well (Figure 3-16).

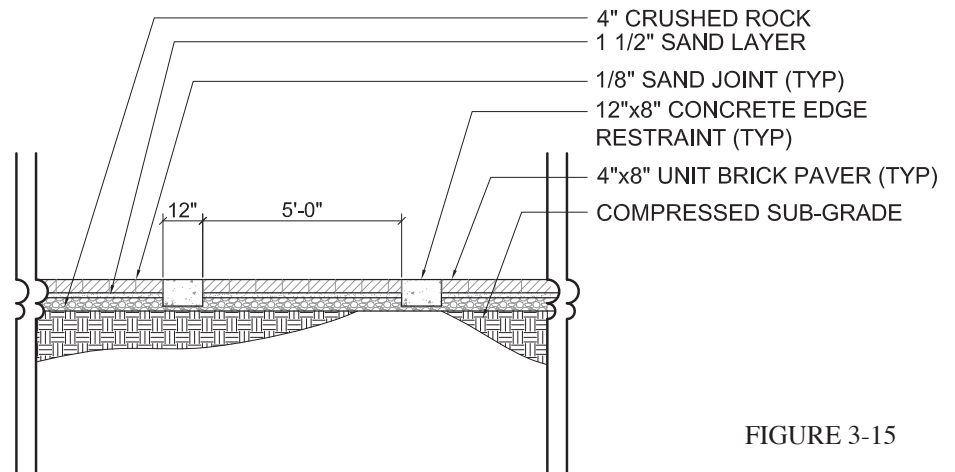


FIGURE 3-15

PAVING DETAILS

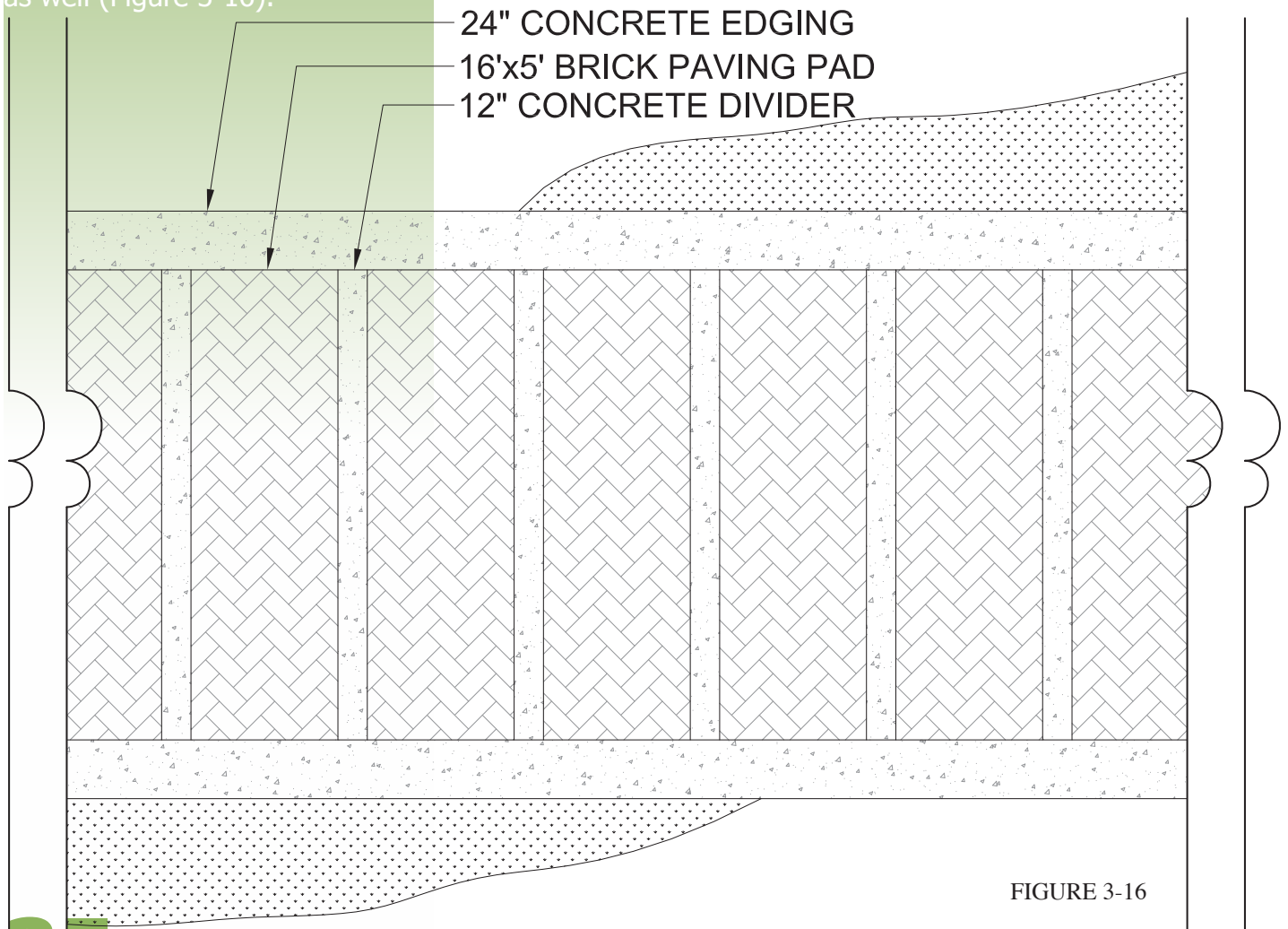


FIGURE 3-16

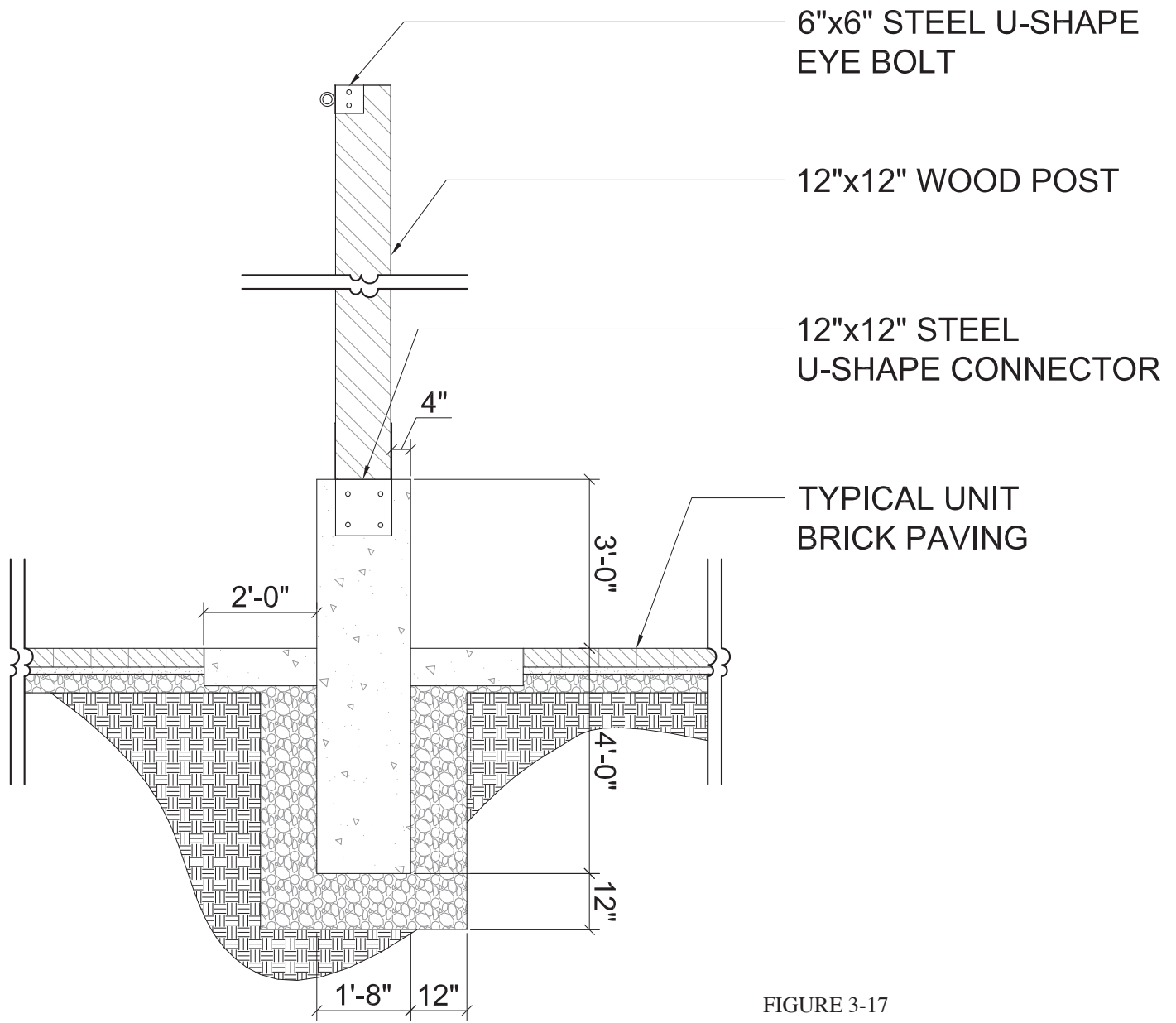


FIGURE 3-17

SHADE DEVICE DETAIL

Canopy shade devices are used throughout downtown to aid in the definition of space and create a variety of sunny and shaded spaces.

The detail above (Figure 3-17) shows how the support beams for each of these shade devices will be constructed. By using an eye bolt to secure the canopies to the pillars, the shade devices can easily be altered depending on the amount of shade desired.

During the summer more solid canopies will create a denser shade. In cooler months perforated canopies can be hung that allow a more speckled shade. This flexibility allows the spaces to be comfortably inhabited during multiple times of the year without having to totally remove the canopies, causing the space to look shut down.

The canopies can be easily removed altogether, however, should special events require more over head space.

FRAMEWORK FOR FUTURE DESIGN

REFLECTIONS

Looking back on the development of this project through its various phases it became apparent that one of the things that it can contribute to future redevelopment efforts is its ability to serve as a case study for effectively engaging community and green space.

Due to this, the final action taken in finishing this project is the establishment of a set of guidelines that can be used to attempt similar projects in the future. It is important to note that all sites are different and they all have different requirements for successful design but that does not mean that there do not exist some overriding principles that can help guide design, no matter the relative location.

This framework is by no means an exhaustive list and it is not trying to be. The framework presented here is simply a starting point from which further design discoveries can be made. Hopefully by sharing the successes and failures of this project, future efforts can push the limits even further and achieve even greater success while avoiding some of the mistakes made here.

SUCCESSSES

The primary success of this project is the creation of a marketable image for downtown Muncie. In developing dynamic and diverse spaces, this redevelopment has created a series of images that Muncie can use to attract new businesses, as well as, new downtown residents and shoppers.

Another success of this project is the improvement of pedestrian circulation. By developing a network of green spaces and pedestrian alleys, transportation throughout downtown is no longer limited to the automobile. No longer do visitors to downtown have to drive from store to store, instead being able to park in one place and spend the bulk of their time moving from place to place by foot.

Finally, this redevelopment of downtown Muncie succeeds in connecting to adjacent assets in a way that downtown does not currently. Connecting directly to the newly renovated Tuhey Park, turning back to face the White River, and making a hub at what could become a very important light rail transit corridor are just three examples of how this new development of downtown Muncie reaches out to the surrounding community.

FAILURES

The primary limiter of this project has been time. If given more time this redevelopment project could easily have mended the issues about to be explained. Alas, more time is not possible and is certainly not a good excuse.

Site-scale detail design has not been developed in this design to the extent that was originally intended. Future projects should ensure they do not suffer the same fate by setting firm design timetable guidelines. This type of time management would also aid in averting another problem that arose here: some places are far more developed than others. While it was always the intent to focus on certain areas and develop them as far as possible, it is still unfortunate that many of the spaces identified in the master plan never received the focused design attention that would have really taken this project to the next level.

The overarching recommendation that can be made from the experiences provided by this project is to understand the scope that is possible given the time allotted and make sure that all design decisions consider that scope carefully and remain inside it.



GUIDELINES

All of the successes and failures just described have lead to the development of a set of guidelines that will aid any design student or professional in undertaking a similar project elsewhere. Again, it can not be emphasized enough that this is by no means an all encompassing list, but simply a starting point. Something that can help future designers reach further, faster without stumbling over some of the same hurdles experienced here. These guidelines are as follows:

1. Create Imagery

Branding and marketability are everything.

2. Consider All Users

People young and old, of all backgrounds.

3. Green Space Isn't Enough

In order to activate spaces there needs to be increases population, green space alone can not create that population.

4. Connect to the Community

Don't be an island, reach out to the site's surroundings.

5. Consider All Seasons

Usability for summer and winter.

6. Create Venues

People will move through space if they have somewhere to go.

7. Make the Pedestrian Rule

Take dominance from the car.

8. Recognize Existing Assets

Don't lose track of what you have.

9. Know Your Limits

How much time do you have?

10. Share Your Ideas

Talk to people, its amazing what ideas they will come up with.

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